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**The 1998 National Survey
of Local School-to-Work
Partnerships:
Data Summary**

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The survey results described in this document reflect the efforts of many dedicated STW leaders. Over 1,000 local partnership coordinators took the time to collect the necessary data from their member institutions and to record that information on the survey questionnaire in 1998. They provided invaluable detail on implementation status and approaches, and on the numbers of students participating in various STW activities. These local staff were supported and encouraged to complete the survey by their state STW directors and evaluation liaisons, whose assistance has been and remains critical to the conduct of the national evaluation. The high rates of response to all three Local Partnership Surveys are due largely to the commitment of these two groups of people.

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INTRODUCTION

The School-to-Work Opportunities Act (STWOA) promotes a broad strategy to help students acquire the skills, knowledge, and habits they need to identify and fulfill their career goals. This strategy is being carried out by states and by local partnerships of educators, employers, labor organizations, and community groups. Mathematica Policy Research, Inc. (MPR) is evaluating the implementation of state and local school-to-work (STW) initiatives. One important component of the evaluation is an annual survey of all STWOA-funded local partnerships.

This report examines the progress of STW implementation. It describes aggregate findings from the third Local Partnership Survey (LPS), conducted in fall 1998, and assesses changes in implementation status based on comparisons with similar surveys in fall 1996 and 1997.

The School-to-Work Opportunities Act (STWOA)

The STWOA provides a framework and support for education reforms designed to help students move from school to productive careers. The legislation outlined the overall objectives of the reforms but provides considerable latitude to states and local partnerships to tailor STW systems to their own needs and constraints. The STWOA specifies three key components as the foundations of STW implementation:

1. ***School-Based Learning.*** Rigorous classroom instruction that is linked to workplace experiences and that provides students with the information and skills needed to identify and prepare for promising careers
2. ***Work-Based Learning.*** Work experience, structured training, and other workplace activities appropriate to students' career interests and linked to their school curricula
3. ***Connecting Activities.*** Efforts undertaken by partnership members to help employers and schools forge and maintain links between the school-based and work-based components

Educators, employers, labor organizations, postsecondary institutions, and other groups are expected to collaborate at both the state and the local levels to develop STW systems with the following key features:

-
- C Career awareness, exploration, and counseling beginning no later than seventh grade
 - C A career-focused program of study--“career major”--by 11th grade, designed to meet state academic standards (including those established under GOALS 2000) and the requirements for transitions to postsecondary education and the achievement of a skill certificate
 - C Curricula that integrate academic and vocational learning and incorporate broad instruction that, to the extent possible, exposes students to all aspects of an industry
 - C Linkages between secondary and postsecondary education and training
 - C A planned progression of work experience and training that is coordinated with school-based learning and that provides students with workplace mentoring and instruction in general workplace competencies
 - C Efforts to ensure all students equal access to the full range of school-based and work-based components

More than \$1 billion has been awarded to states and local partnerships to help them implement STW systems with these features.

**The National
Evaluation of School-
to-Work
Implementation**

The STWOA requires the Secretaries of Education and Labor to conduct a national evaluation of the initiatives developed with the help of STWOA funding. In September 1995, a contract for a five-year evaluation was awarded to MPR and its subcontractors, MPR Associates and Decision Information Resources, Inc.

The evaluation has four objectives:

1. Assess states’ progress in creating coherent STW systems
2. Identify promising practices for and possible barriers to the development of STW systems

-
3. Describe partnership roles, including the extent and nature of participation by employers, schools, postsecondary institutions, and other groups
 4. Measure student participation and key transitions

To address these objectives, the evaluation includes three main components for documenting the changes that occur as STW implementation advances:

1. ***Local Partnership Survey (LPS)***. This survey, conducted in fall 1996, 1997, 1998, and 1999, is documenting the characteristics and development of STW partnerships, the roles of partnership members, and the aggregate levels of student participation in key STW activities.
2. ***In-Depth Case Studies***. Site visits in 1996, 1997, and 1999 have documented how state and local partnership models have been planned, designed, and implemented in eight states (Florida, Kentucky, Maryland, Massachusetts, Michigan, Ohio, Oregon, and Wisconsin) and in six local partnerships in other states that have received direct federal grants.
3. ***Study of Student Experiences***. Surveys of three cohorts of 12th-grade students (spring 1996, 1998, and 2000) in the same eight states are examining their experiences in high school, including their access to and participation in key STW components. High school transcripts are being used to describe the courses students take and which student subgroups participate most heavily in particular STW activities. Follow-up surveys will examine students' progress in postsecondary education, training, and employment.

A series of annual evaluation reports is synthesizing information obtained from these components. A list of publications from the evaluation is included at the end of this report.

**The Local
Partnership Survey
(LPS)**

The third round of the LPS was conducted between October 1998 and March 1999. Its main features are as follows:

- © **Potential Respondents.** By summer 1998, 42 states plus Puerto Rico had received STW funding. However, several of these states had received their STWOA grants too recently to have formed and funded local partnerships, and therefore to be included in the 1998 LPS. The 1998 LPS was administered to (1) all local partnerships that had received substate grants in 35 of the funded states, and (2) partnerships funded directly by the U.S. Departments of Education or Labor in these 35 and 11 other states. Most STW partnerships surveyed in 1998 had been funded earlier and were included in the 1996 and 1997 LPS as well.
- © **Response Rate.** Of the 1,291 partnerships identified for the 1998 LPS, 1,117 returned completed questionnaires.¹ The response rate was 88 percent in states with state STWOA implementation grants and 87 percent overall (including partnerships with direct federal grants in other states). Among partnerships that responded, approximately 53 percent were located in primarily rural areas, 36 percent in primarily suburban areas, and 11 percent in primarily urban areas. This distribution is almost identical to that of partnerships responding to the earlier two surveys.
- © **Focus.** To limit the burden on partnership coordinators, the LPS collects information primarily about secondary school activity. This emphasis mirrors that of the STWOA; many of the components specified in the legislation are intended for high school implementation. “Secondary schools” in the LPS include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. Some information is collected about STW components in alternative education and postsecondary programs, however.

¹Of the respondents, 1,023 completed the full survey, and 94 partnerships no longer receiving STWOA funds responded to a short (one-page) version. These partnerships with limited responses are not included in the detailed tables and discussion here but will be included in a later analysis of sustainability.

Purpose and Organization of This Summary Report

This brief report is intended to provide a snapshot of aggregate LPS results. It is structured to document the overall key findings on implementation and to allow state STW directors to measure the status and progress of their own state against those of the nation. Although the focus of the report is on implementation in 1998, we also note any significant changes from earlier years. In particular, each section begins with a summary and figure that describe the trends in implementation of the feature or component across the three years of the LPS. Most of the discussion, however, is based on tables presented in Appendix A, which display the 1998 LPS national-level data results.² These tables can be compared to the 1997 and 1996 tables included in Appendixes B and C, respectively, and in earlier reports.³

The rest of this report presents the survey data results by topic: (1) partnership composition and governing boards, (2) career awareness and development activities, (3) efforts to promote access to STW systems, (4) definition and prevalence of career majors, (5) curriculum integration strategies, (6) secondary-postsecondary linkages, (7) new standards and certification, (8) business and labor support, (9) work-based learning opportunities, and (10) characteristics and outcomes of seniors in intensive STW activities. The tables appropriate to each topic are referenced in the margins.⁴

PARTNERSHIP COMPOSITION AND GOVERNING ENTITIES

Table 1 Table 2

The STWOA stresses the importance of establishing a broad collaborative organization and process to develop STW systems. The emphasis on partnerships reflects a belief that cooperation among schools, employers, secondary and postsecondary institutions, labor, and community groups will allow students access to the full range of school-based and work-based components called for in the legislation and promote their transitions to higher education and future careers. Although the legislation does not require them to do so, many partnerships choose to formalize this cooperation through governing boards or councils that set policy and oversee STW planning and implementation.

²The same set of tables was prepared for all state STW directors but included only partnerships in their own state.

³See Hulsey and Silverberg 1998 and Silverberg 1997.

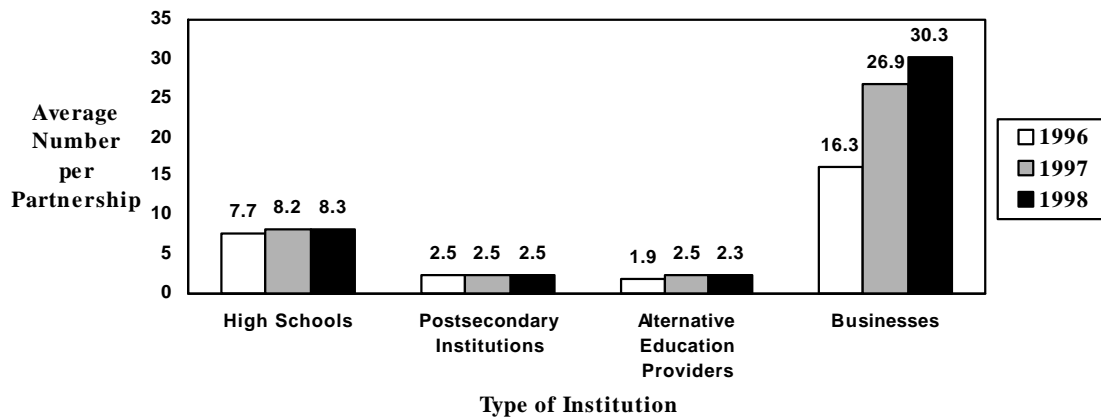
⁴Appendix D describes how key measures in the tables were computed.

Partnerships and their boards take a variety of forms. The LPS asked partnership coordinators to identify the number and types of entities included as partnership members and to specify which single entity is responsible for partnership leadership and/or fiscal matters. The LPS also collects information about the establishment of and representation on partnership governing boards.

Trends in Implementation: Partnership Composition

Data collected over the past few years suggest that membership in STW partnerships is solidifying. There has been significant growth, particularly between 1996 and 1997, in the total number of districts, schools, colleges, employers, and other groups that are considered members of partnerships nationwide. This growth has been due largely to the establishment of new partnerships, however. Within partnerships, the average number of high schools, postsecondary institutions, and alternative education providers has remained relatively stable (Figure 1). In contrast, business membership expanded substantially each year between 1996 and 1998.

Figure 1: Members of Local STW Partnerships



The data collected by the 1998 LPS provide information on three main issues related to the composition and governance of local STW partnerships:

What types of institutions/organizations are involved in STW partnerships, and to what extent?

- C *STW partnerships cover a substantial share of U.S. schools.*
Within the 35 states surveyed, about two-thirds of all secondary districts and schools are included in STW partnerships. The more than 6,700 school districts and 8,500 high schools counted as partnership members in those states represent over 40 percent of all districts and high schools nationwide.
- C *Although the total number of districts and schools in STW partnerships has grown, average partnership size is fairly stable.* The 6,700 school districts and 8,500 high schools involved in STWOA-funded partnerships in 1998 represent a 6 percent and 5 percent increase, respectively, from the previous year. This growth is due primarily to expansion in the number of partnerships, rather than to growth in the membership of existing partnerships. In both 1997 and 1998, there were, on average, about 7 districts and 8 high schools per partnership.
- C *Extent of postsecondary membership remains unchanged.*
The average number of postsecondary partners has also remained stable, with partnerships reporting an average of 1.4 two-year and 1.1 four-year institutions as members each year. The total number of postsecondary partners reported in 1998 was quite large--1,410 two-year and 1,117 four-year institutions.⁵
- C *Representation of alternative education providers in STW partnerships remains solid but has declined somewhat.*
Approximately 73 percent of 1998 partnerships (749) reported counting as members organizations or institutions that offer GED or alternative diploma programs (including “second chance” programs) for high school age or older

⁵This computed total is likely to include significant double-counting, however. Colleges often work with multiple school districts and partnerships on STW activities and may therefore be counted as members of more than one partnership.

youths.⁶ Although this percentage remained unchanged since 1997, the average number of alternative education providers per partnership fell from 2.5 in 1997 to 2.3 in 1998. In fact, even the total number of alternative education members decreased between 1997 and 1998, despite growth in the number of partnerships. This decline is a result of two factors: (1) new partnerships include fewer alternative education institutions, and (2) older partnerships appear to have lost some alternative education members. This result may reflect difficulties some STW partnerships have in folding alternative education providers into their systems, which are typically dominated by traditional secondary schools.

- C *Growth in business and industry membership in STW partnerships has continued but slowed.* As was true the previous year, 95 percent of partnerships in 1998 included at least one private-sector firm, trade association, or Chamber of Commerce. Private-sector firms and Chambers of Commerce were each reported as members by at least 80 percent of partnerships, but other business or trade associations were reported by fewer than half of partnerships. The average number of individual private-sector firms per partnership grew from 26.9 to 30.3 between 1997 and 1998. Still, this growth in employer membership has slowed recently; the average number of firms per partnership grew much more between 1996 and 1997 (see Figure 1).

How are STW governing boards structured?

- C *The boards or councils that oversee STW continue to grow.* Approximately 89 percent of partnerships in 1998 have such boards, up only slightly from 88 percent in 1997. Overall, the average number of board members increased from 30 in 1997 to 34 in 1998. This growth is due in part to new partnerships having larger governing boards. However, older

⁶These programs could be offered by community-based organizations, colleges, high schools, correctional facilities or other entities as part of dropout prevention strategies targeted to students currently in school or as efforts to encourage re-entry for out-of-school youth.

partnerships also added members to existing boards, perhaps as a strategy to institutionalize or sustain STW by broadening the base of support. Among partnerships with governing boards or councils, the number of board members varies significantly, however, with some partnerships reporting fewer than 5 and others more than 100 members.

- C *Secondary educators remain better represented on governing boards than postsecondary educators.* Although serving on a STW governing board is one of the important ways postsecondary institutions contribute to partnerships, representation of postsecondary members did not change appreciably between 1997 and 1998. In contrast, the number of secondary educators on governing boards increased by about 10 percent during the same period. Across partnerships in the 1998 LPS, there are about 10,500 STW secondary education board members, compared to fewer than 2,000 postsecondary board members.⁷ More partnerships include secondary school staff (99 percent of those with governing boards) than postsecondary staff (81 percent of those with boards) on their governing boards.
- C *Large numbers of employers continue to be included on governing boards.* In 1998, 77 percent of partnership governing boards included staff of private-sector firms, similar to 1997. Over 6,000 members (an average of 6.3 per partnership) of STW governing boards represent individual private-sector firms, and close to 3,000 additional board members represent business or labor associations, including Chambers of Commerce. Although some states have encouraged STW partnerships to form boards in which at least 51 percent of the members are employers, only about 7 percent of partnerships have employers as a majority of their board members.

⁷STW partnerships count far more secondary than postsecondary schools as members, however, so the two types of institutions should not be expected to have equal representation on governing boards.

Who plays leadership roles in STW reforms?

- C *Leadership is increasingly shared by multiple partners.* STW partnerships include various types of entities, and in some 1998 partnerships (about 30 percent) the entities work so collaboratively that local coordinators are unable or unwilling to identify a single organization as leading the STW effort. This phenomenon has become more common since 1997, when about 25 percent of partnerships did not report a single lead organization.
- C *Educational institutions are still considered most influential in designing, developing, and coordinating partnership-wide activities.* Most partnerships with a single lead organization report educational institutions as leaders. In 1998, about 56 percent of all partnerships (68 percent of those reporting a single lead organization) were led by an educational institution. Partnerships most often (32 percent) attribute leadership to local school districts. Another 6 percent and 5 percent report that an individual high school or area/regional vocational center, respectively, plays that role. Postsecondary institutions are considered the lead organization in about 6 percent of all partnerships. The percentage of educational organizations leading partnerships has fallen somewhat since 1997, however, while the percentage of businesses in leadership roles, though significantly smaller, has increased.
- C *Schools also continue to have financial responsibility for partnership funds.* As in previous years, about 85 percent of all partnerships reported that an educational institution of some kind functions as the fiscal agent for the partnership, with the task of overseeing at least the STWOA grants. Local school districts are by far the most likely to be designated as a partnership's fiscal agent (51 percent).

C *Employers' leadership of policymaking councils is common and increasing.* If chairing a governing board reflects some leverage and influence on STW development activities, then the private sector plays a lead role in almost as many partnerships (about 44 percent) as do secondary school staff (about 46 percent). This distribution in 1998 reflects a substantial relative increase in board leadership by employers: in 1997 employers and employer groups led boards in only 39 percent of partnerships, compared to 44 percent for secondary school personnel. The shift is due primarily to an increase among older partnerships in the percentage of governing boards chaired by staff of private firms, perhaps a result of the transformation of some STW partnership entities into workforce development boards.

CAREER AWARENESS AND DEVELOPMENT ACTIVITIES

Table 3
Table 4

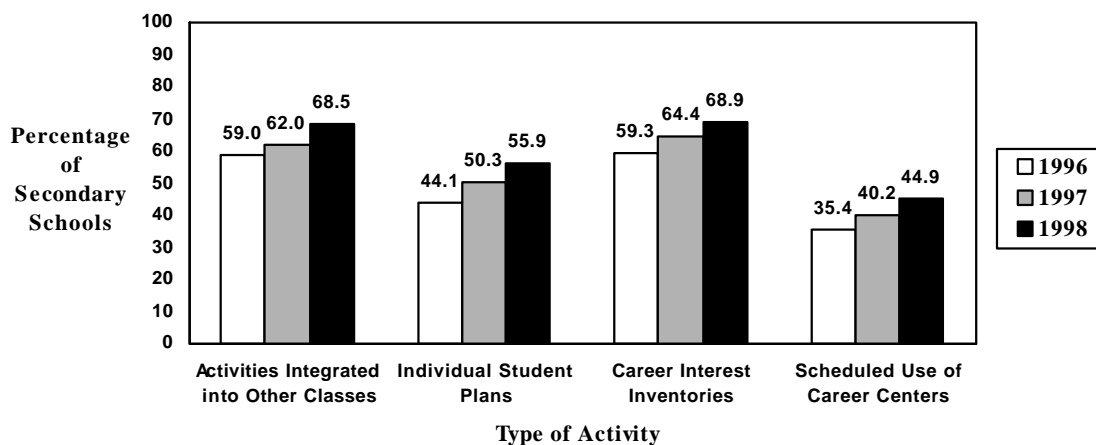
The STWOA identifies career development as an important way to help students explore career interests, identify career goals, and choose courses and other activities that prepare them to meet those goals. The legislation promotes career awareness and career exploration and counseling for all students, beginning no later than seventh grade.

Partnerships adopt diverse approaches to providing these activities, including (1) offering separate career development or work readiness courses, (2) using academic or vocational class time to cover units on careers, (3) requiring students to develop educational plans specifying high school and postsecondary courses relevant to their career goals, (4) encouraging students to take career interest and aptitude assessments, and (5) scheduling time for students to research careers in school-based career centers. The third LPS asks partnerships to record the number of secondary schools, postsecondary institutions, and alternative education providers that were implementing these strategies during the 1998-1999 school year.

Trends in Implementation: Career Development

Survey responses indicate that career development activities are increasingly widely available in STW partnerships and their secondary schools (Figure 2). Schools offer various types of services--ranging from individual career counseling and student plans to special career development classes and scheduled time in career centers--and all of them have become more prevalent. Not only are more partnerships and schools offering these activities, but among older, more established partnerships, expansion was even greater, which suggests that career development remains a priority for ongoing STW development.

Figure 2: Career Development Availability in Local STW Partnerships



The 1998 LPS data provide detailed information on the following issues concerning career awareness and development:

How prevalent are career development activities among partnership schools?

- C A large and increasing proportion of STW partnerships and schools routinely offer career development opportunities to secondary students. Almost every partnership and over 80 percent of all STW partnership schools make some type of career development activity available to some students in

high school. For example, 86 percent of 1998 partnerships and about 45 percent of partnership schools offered separate career awareness or career development classes. The availability of this and many other career development opportunities has grown since 1997. For example, separate career classes were offered to students in only 81 percent of partnerships and 43 percent of schools a year earlier.

- C *Completing career interest inventories and using regular class time for special units or lessons on careers remain the most popular approaches to providing career development.* In the 1998-1999 school year, about 95 percent of all partnerships and about 69 percent of all partnership secondary schools had adopted each of these methods. In addition, more than one-third of all partnership postsecondary institutions used these approaches. These two types of activities were also the most commonly reported in the earlier surveys. Other activities are somewhat less prevalent; for example, 56 percent of partnership schools in 1998 required students to complete individual course plans, and 45 percent of schools had students research careers at a career center.
- C *Individual career counseling and career fairs are increasingly common.* While the availability of all types of career development and awareness activities is growing, the largest increases between 1997 and 1998 are in these two approaches. The percentage of partnership schools offering individual career counseling rose significantly, from 57 percent to 65 percent, and the percentage holding career fairs climbed from 48 percent to 55 percent. Career fairs provide an opportunity to involve large numbers of both employers and students.

Does availability of these services vary across partnerships with different characteristics?

- C *Career development activities continue to be somewhat more prevalent among rural partnership schools.* Schools in 1998 rural partnerships are somewhat more likely to offer career development opportunities than are schools in suburban or urban partnerships. For example, 59 percent of secondary schools in rural partnerships held career fairs, compared to

55 percent of schools in urban partnerships and 52 percent in suburban partnerships. On the other hand, urban partnership schools were more likely than those in rural areas to offer separate workplace readiness classes or use of a career center. In all three years of the LPS, schools in suburban partnerships were least likely to make career development opportunities available.

- C *The prevalence of some types of career development continues to decline among alternative education providers.* In contrast to secondary schools, alternative education providers that are members of STW partnerships have not expanded implementation of career development activities. In fact, in 1998 the proportion of providers offering certain activities--such as development of student plans (31 percent) and individual career counseling (38 percent)--was lower than the proportions reported in 1997, even among older partnerships.

PROMOTING ACCESS TO SCHOOL-TO-WORK

Table 5

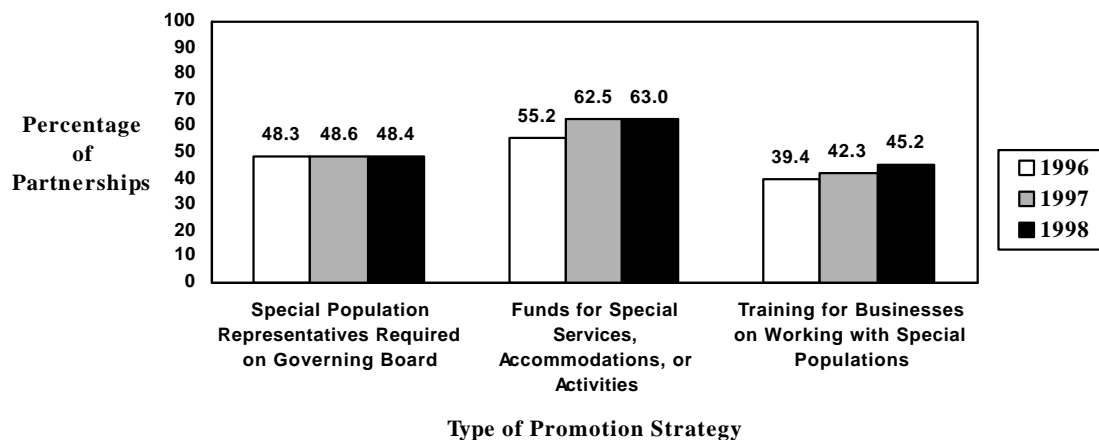
Achieving the objective of large-scale participation means ensuring that youth who face particular barriers to successful careers are not excluded from the school-based and work-based opportunities the STW partnerships are developing. The legislation stipulates that partnerships provide all students with equal access to the full range of STW activities.

Partnerships and their member schools are encouraged to identify appropriate ways to facilitate participation for special populations, including students with disabilities, at-risk and out-of-school youth, and students in special education. Partnerships may undertake strategies that affect all or some of their member schools, or individual schools may be charged with fulfilling this mandate on their own.

Trends in Implementation: Promoting Access

Some efforts to promote STW access among special population groups have expanded, according to survey reports. School-level strategies such as preparing native-language instruction, providing interpreters for STW activities, or offering special career guidance are somewhat more available in 1998 than in previous years. More important as a measure of priority, however, partnership-level activities have remained fairly constant. Aggregating across all the special population groups, the data (shown in Figure 3, but not in the tables) suggest little change in the extent to which partnership entities themselves set aside funds, services, or governance slots on behalf of special populations.

Figure 3: Promoting Access to STW for Special Populations



Coordinators' responses to the 1998 LPS address several issues concerning promotion of access for special populations:

To what extent do partnerships use special strategies to encourage STW involvement by special population groups?

- C Almost all partnerships report taking steps to facilitate participation for members of special population groups. In 98 percent of all STW partnerships in 1998, either individual schools or the partnerships themselves are working to implement at least one type of special service or accommodation to increase student access to STW activities.

Most partnerships rely on multiple strategies and target a variety of different populations.

- C *Most partnerships continue their reliance on individual schools to decide on and adopt particular strategies.* As was true in earlier years, in relatively high proportions of 1998 partnerships, schools on their own institute specific measures to improve access to STW. For example, individual schools in between 45 percent and 70 percent of partnerships (depending on population group) use targeted promotional materials to attract members of special populations to STW. Fewer partnerships have explicitly taken steps at the partnership level to promote the participation of students from special populations.
- C *Devoting STW resources to special activities remains a common partnership-level strategy.* For example, in 1998 just over half of all partnerships reported using some STWOA grant funds for special services, accommodations, or activities intended to increase participation by economically or educationally disadvantaged students. A similar proportion allocated grant resources to improve access for students with disabilities.
- C *Schools in most partnerships continue to provide special career guidance, tutoring, and/or regular progress evaluations for special populations.* Special career guidance services are the method most likely to be available in at least some schools in a partnership. Between 61 percent and 86 percent (depending on population group) of all partnerships in 1998 had some schools implementing this strategy--an expansion over earlier years. Tutoring and progress evaluations were reported by between 51 percent and 82 percent of 1998 partnerships, also up from 1997.

Which special population groups receive the most attention?

- C *Strategies continue to target students with disabilities and those who are economically or educationally disadvantaged.* In 1998, as well as in previous years, higher proportions of partnerships reported taking steps to ensure participation of these groups than for any other special population groups. Both partnership-level and school-level strategies are

concentrated on students with disabilities and those at risk of academic failure. This emphasis probably reflects, in part, the greater number of students in these groups.

- C *Particular strategies favor different groups.* For example, targeted promotional materials are used most frequently to encourage students with nontraditional occupational interests to participate in STW activities (69 percent of partnerships in 1998). Special tutoring services are common to help Limited English Proficiency (LEP) students participate and remain involved in STW.

CAREER MAJORS

Table 6
Table 7

The STWOA encourages schools to offer students rigorous, career-focused programs of study. As envisioned in the legislation, all students would, no later than 11th grade, identify a broad area of career interest and follow a career major--a related coherent sequence of courses that prepares them for eventual entry into the chosen field. These programs of study are expected to link academic and occupational instruction and work-based learning and to lead to postsecondary education or training as appropriate.

Career majors are a relatively new way of organizing course selection for all students. Programs with the features of career majors already exist in many schools--such as some youth apprenticeship, Tech-Prep, and career-academy programs--but they serve small numbers of students. Some partnerships and their members are expanding career major options by building on these earlier initiatives.

Defining and implementing career majors can be challenging, depending on how the programs of study are structured. Some partnerships and schools cluster students with the same major in a few key classes to enhance the career focus of the curriculum. Some schools are choosing to offer defined career majors gradually, making only one or two available for students interested in those particular fields.

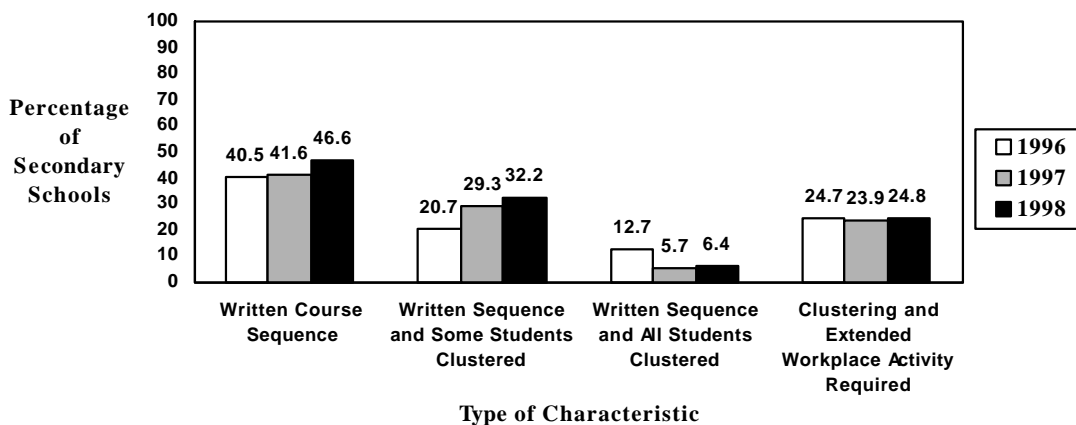
The LPS collects information on the prevalence and definition of career majors. Partnership coordinators were asked to report the number of their schools implementing career majors with different characteristics. Without regard to definition, the coordinators were also asked to document the number of schools offering career majors in different

industry categories and the number of SY 1998-1999 12th-grade students participating in each category.

Trends in Implementation: Career Majors

Recent LPS data show expansion in the availability of career majors. Schools differ in how they define and implement career majors, however, and growth patterns vary to some extent by type (Figure 4). There was expansion to more schools, for example, of majors defined as written guides with recommended, relevant courses, and similar growth in the proportion of schools that “cluster” at least some students who choose the same career area into a few key courses--as do many career academy, youth apprenticeship, and Tech-Prep programs. In contrast, there has been little change in the prevalence of career major programs that require related internships or jobs.

Figure 4: Definitions of Career Majors



The 1998 LPS data respond to several important questions about career majors:

To what extent are career-focused programs of study available in partnerships and their schools?

- C *Partnerships increasingly offer career majors, in at least some of their schools.* About 80 percent of all partnerships make some type of career majors available in at least one of their member schools. A smaller percentage of partnership schools--just over half--currently offer any career majors,

however. These overall measures of career major prevalence increased significantly between 1997 and 1998.

- C *Rural partnerships' implementation of career majors has grown most, but continues to lag behind that of other locales.* As in earlier years, schools in 1998 rural partnerships were less likely to offer career majors (49 percent) than were schools in suburban (51 percent) and urban (58 percent) partnerships. These figures reflect a narrowing of the gap between rural and other locales, however, partly because of a decline in the prevalence of some types of career-focused programs of study in urban partnerships.

How are these career majors defined?

- C *Almost all career majors are based on written course sequences.* Among partnership schools in 1998 that offered at least one career major, the vast majority (nearly 47 percent of all partnership schools, or 92 percent of schools with majors) reported forming majors around written course sequences that are distributed to guidance staff and used to help at least some students make relevant course selections. These written sequences, on their own, may represent a modest form of career major, aiding counselors in recommending appropriate electives based on students' career interests. Alternatively, the sequences may be the basis for more-structured career major programs, identifying a set of required academic and occupational courses for students who choose to participate.
- C *Career majors that include student clustering were somewhat more common in 1998 than in earlier years.* Career majors usually involve grouping at least some students by career interest. Although some schools use written course sequences primarily as an optional guidance tool, most partnership schools with career majors try to "cluster" students who choose the same major in a few key courses. In almost one-third of 1998 partnership schools (63 percent of all schools with majors), at least one career major program was offered in which participants were grouped in some classes (for example, as part of a career academy or Tech-Prep program). About 29 percent of partnership schools used this career major approach in 1997.

Schoolwide career clustering is much less prevalent (just over 6 percent of 1998 and 1997 partnership schools). In these schools, all students are expected to choose a broad career focus for their studies and are grouped with similarly interested students in some academic and occupational courses.

- C *About one-quarter of partnership schools offer a career major that includes a workplace component.* In 1998, about one-quarter of partnership schools (about half of all schools with career majors) offered at least some students what comes closest to the program-of-study model promoted by the STWOA--a structured sequence of academic and technical courses linked to related work-based learning. There has been little growth in the prevalence of this kind of career major program.

In what industry areas are career majors offered and students participating?

- C *Career majors continue to be most prevalent in Business and Engineering/Industrial Technology.* About 40 percent of partnership schools offered some type of program of study in the Business career area, and about one-third of schools offered a career major in the Engineering/Industrial Technology area. The prevalence of both these career major clusters increased from earlier years, with expansion greatest among schools offering Business majors.
- C *The involvement of seniors in a career-focused program of study remains just over 10 percent.* Despite growth in the availability of most types of career majors, the proportion of seniors involved has remained fairly stable. Participating students--who undoubtedly were involved in very different types of career major experiences--represented just under 12 percent of all 12th-graders in 1998 partnership schools. A similar, although slightly smaller, percentage was reported in earlier years. The total number of students reported to have a career major has increased, but this expansion in the number of students is due largely to an increase in the

percentage of partnerships able to provide counts of students choosing career majors.⁸

CURRICULUM INTEGRATION STRATEGIES

Table 8

The STWOA encourages local partnerships to integrate academic and vocational instruction and to link school-based and work-based learning. The impetus for these efforts is a belief that bringing more relevant applications into academic learning and more academic rigor to occupational and work-based learning will better engage students' interest and intellect and help them reach higher levels of achievement.

The same motives were evident in earlier initiatives that also emphasized curriculum integration reforms, including the 1990 Amendments to the Carl D. Perkins Vocational Act and its Title IIIIE provisions regarding Tech-Prep. Many STW partnerships are continuing or expanding integration efforts begun under these other initiatives.

Strategies to link academic and occupational learning are quite diverse. Some partnerships and schools encourage approaches that assist individual teachers or groups of teachers in developing and implementing new curriculum units. These approaches include promoting team teaching, providing common planning periods for teachers involved in the same career major, and adopting block scheduling of courses to allow for the longer class periods considered desirable for applied and project-based learning. The sources of integrated curricula also vary: some are purchased from commercial vendors, and some are developed by individual teachers.

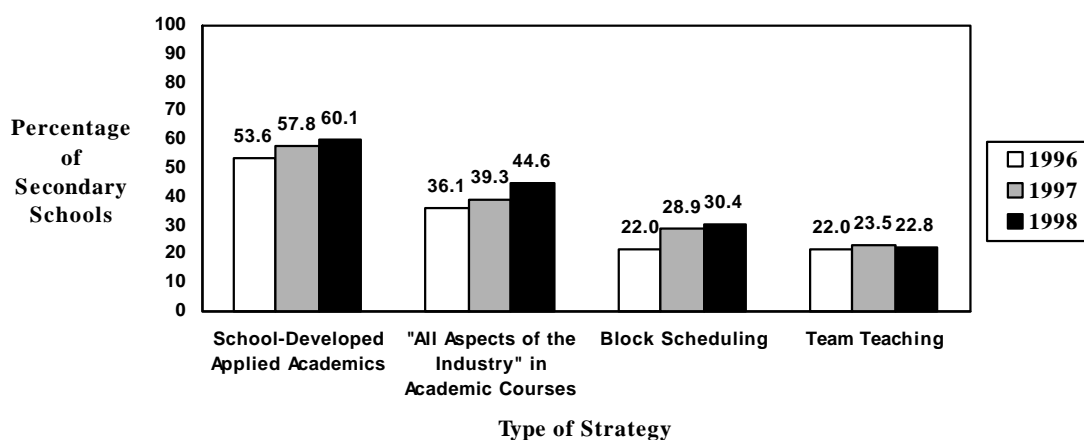
The particular strategies that partnerships and their schools use depend on local needs and constraints. The LPS asked partnership coordinators to record how many of their secondary schools and postsecondary institutions were implementing each of 11 curriculum integration approaches that had been observed as part of field research.

⁸In all three years of the LPS, substantial proportions of partnerships were unable to provide counts of students participating in career majors of any type. Thus, the reported numbers probably underestimate the actual level of student involvement in career majors.

Trends in Implementation: Curriculum Integration

Efforts to integrate academic and vocational curriculum have, in general, increased modestly since 1996. Integration approaches range from adopting or creating applied academic curriculum to revising courses to cover all aspects of an occupational pathway; some of these have become more available among partnership schools (Figure 5). Some tools used by schools to facilitate curriculum integration--such as block scheduling--have also become more prevalent, while others (including team teaching) have changed little over the years.

Figure 5: Curriculum Integration



Coordinators' responses to the 1998 LPS suggest several findings concerning curriculum integration:

Which curriculum approaches do partnership schools emphasize to integrate academic and vocational education?

- C *Use of applied academic curricula continues to be most common.* Among partnership secondary schools in 1998, 60 percent used applied academic curricula developed by teachers in their individual schools, 50 percent used such curricula developed by commercial vendors, and 41 percent were implementing state-developed applied academic curricula. Much smaller proportions of postsecondary partners used these integration strategies. The applied academic approach focuses on teaching academic classes by

involving students in hands-on applications of theoretical concepts, using examples from careers, industries, or the world of work more generally.

- C *Many schools incorporate all aspects of the industry into their vocational and academic curricula.* Coordinators report that in 1998 a substantial proportion of secondary (48 percent) and postsecondary schools (31 percent) have broadened vocational-technical instruction to emphasize the diverse set of issues and occupational pathways related to the particular industry or career focus (including financial, management, technology, and environmental roles and responsibilities). A somewhat smaller proportion of schools have adopted this broad career exposure approach in academic courses--45 percent and 28 percent in secondary and postsecondary institutions, respectively.
- C *Implementation of most curriculum integration approaches has grown slightly.* Enthusiasm for curriculum innovation has translated to some extent into broader adoption of various approaches. For example, implementation of school-developed applied academic curricula grew from about 58 percent of partnership schools in 1997 to about 60 percent of partnership schools in 1998. Use of state-developed applied curricula increased even more substantially--from about 36 percent to 41 percent of schools in 1997 and 1998, respectively. Efforts to expose students to "all aspects of the industry" also expanded.

What kinds of tools are used to facilitate curriculum integration?

- C *Block scheduling is the most common organizational support for integration in school.* Among the ways teachers and administrators arrange school time to encourage curriculum changes, block scheduling is most popular. This strategy--reducing the number of courses students take (and teachers teach) and lengthening each class period--was implemented in just over 30 percent of partnership schools in 1998. Bringing secondary teachers together periodically to develop joint curricula that emphasize a specific career area was implemented in about 28 percent of partnership schools. Team teaching and common planning periods were less common.

-
- C *Some schools collaborate with external partners on curriculum change.* For example, in 1998 just over one-quarter of partnership secondary schools and postsecondary institutions reported working with their counterparts to develop new course units and materials for use at either or both levels. Teachers from somewhat higher proportions of schools (33 percent) and colleges (31 percent) worked together with employer representatives on curriculum issues, according to partnership coordinators.
 - C *There has been little change in overall implementation of these integration tools.* Despite modest growth in the use of applied academic curricula and other integration approaches, the tools to support these efforts appear to be about as prevalent among partnerships in 1998 as in 1997. Only one of the organizational supports and collaborative structures that facilitate integrated curricula expanded significantly during that time: in 1998, 26 percent of partnership schools grouped secondary and postsecondary teachers together to work on curricula, compared to 23 percent a year earlier.

SECONDARY-POSTSECONDARY LINKAGES

Table 10

The STWOA recognizes the importance of helping students pursue postsecondary education and increasing the number of students who do so. The legislation identifies “effective linkages between secondary and postsecondary education” as a requirement of all STW system initiatives.

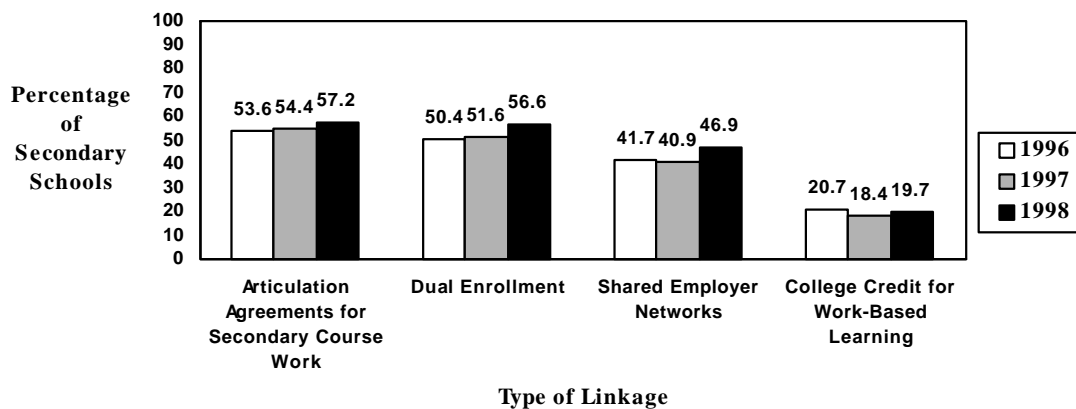
Which specific types of linkages are created is left to partnerships to decide. Articulation agreements between high schools and community colleges are in place in many localities, the result of Tech-Prep or even earlier initiatives. These agreements are intended to facilitate students’ transition from secondary to postsecondary institutions by eliminating redundancies in course work and providing opportunities to earn college credit or for advanced standing for skills acquired in high school.

High schools and postsecondary institutions collaborate in other ways as well. For the LPS, partnership coordinators reported on the number of their members adopting each of nine different strategies.

Trends in Implementation: Secondary-Postsecondary Linkages

Collaboration between secondary and postsecondary STW partners is expanding modestly, according to recent LPS data. While there was little change in the extent of institutional linkages and interactions between 1996 and 1997, new partnerships in 1998 appeared to emphasize these activities, and older partnerships made them somewhat more available among their schools and colleges. The greatest areas of growth include the sharing of labor market information and employer networks, the availability of dual enrollment agreements for high school students who want to take college-level courses, and articulation agreements granting college credit for secondary coursework (Figure 6). The prevalence of other strategies, such as joint staff development, sharing of equipment, and arrangements that grant college credit for work-based learning, grew little, if at all, over the three years.

Figure 6: Secondary-Postsecondary Linkages



The responses of partnership coordinators to the 1998 LPS provide answers to several questions:

What types of strategies do partnerships use to link secondary and postsecondary education?

C Articulation agreements remain the most common arrangements. Well over half of all 1998 partnership secondary schools and postsecondary partners have

developed agreements that allow either for the granting of college credit or for advanced standing for secondary school course work. The proportion of partnership schools that offer articulation agreements rose from 54 percent to 57 percent between 1997 and 1998.

- C *A small but increasing share of colleges have articulation agreements that cover high school work-based learning.* Agreements allowing students to receive postsecondary credit for work-based learning activities completed during high school are significantly less popular than those granting credit for course work. Only 20 percent of partnership postsecondary institutions had agreements covering work-based learning in 1998, up slightly from 18 percent in 1997. These agreements may include arrangements between high schools and apprenticeship programs, which have traditionally treated hours at a worksite as formal learning.
- C *Dual enrollment agreements are increasingly prevalent.* In 1998, about 57 percent of partnership secondary schools, and just over half of partnership postsecondary institutions, offered students the opportunity to enroll in college courses while completing their high school curriculum. These measures reflect growth in the availability of dual enrollment, from 52 percent of schools and 48 percent of postsecondary institutions a year earlier.
- C *Sharing of labor market and employer information continues to be a frequent form of institutional linkage.* More than 45 percent of all partnership secondary schools and postsecondary partners communicate with their counterparts about labor market information or employer contacts. The percentage of secondary schools sharing employer networks increased most substantially, from 41 percent in 1997 to 47 percent in 1998.

STANDARDS AND CERTIFICATION

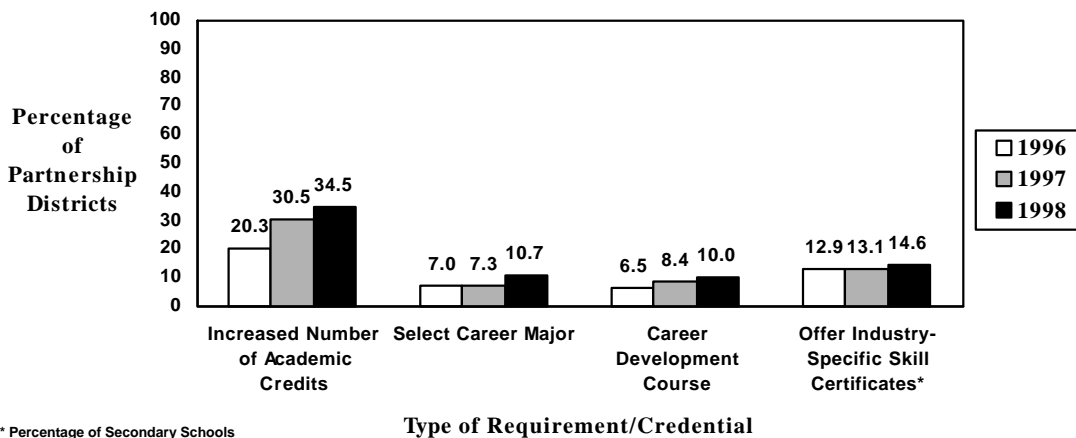
Table 11	STW systems are expected to align with or lead efforts to raise academic and technical skill standards. States and local partnerships are required to coordinate STW implementation with initiatives to develop and
Table 12	
Table 13	

implement challenging academic standards under the Goals 2000: Educate America Act. State and local partnerships are also encouraged to upgrade technical skill instruction and promote the use of industry-based skill standards and portable skill certificates. The LPS collects information about new graduation requirements in STW partnerships. Coordinators were also asked to report on certification practices for general and industry-specific skills.

Trends in Implementation: New Graduation Requirements and Skill Certification

LPS data suggest some recent emphasis on new graduation requirements and skill certification among partnerships and their members. For example, a growing proportion of partnership districts now have high school graduation requirements that include (1) more academic credits than prior to 1994, (2) selection of a career major, or (2) the completion of a career development course (Figure 7). In addition, compared to earlier years, in 1998 a higher fraction of partnership secondary schools awarded skill certificates to students each year based on local-, state-, or national-level industry standards.

Figure 7: New Requirements and Skill Certificates



The 1998 LPS data address two key issues relating to standards and certification:

To what extent are changes in high school graduation requirements occurring alongside STW reforms?

- C *Partnership members are increasingly adopting tougher academic requirements.* Almost 70 percent of all partnerships in 1998 (compared to 60 percent in 1997) reported that since July 1994, at least one member school district has increased the number of academic credits required for high school graduation. These changes are adopted in only some districts, however; just over one-third of all 1998 partnership school districts (compared to 31 percent in 1997) have raised academic credit requirements. Such efforts, though widely supported by STW leaders, have raised some concerns that opportunities for career-related electives in students' schedules may be diminished.
- C *Some career- or work-based requirements are becoming more common.* Compared to 1997, a somewhat higher proportion of partnership districts now require graduates to select a career major, complete community service, or take technology, vocational, or career development education credits--requirements that have a direct bearing on many STW initiatives. Career major requirements have experienced the greatest growth--from 7 percent of districts in 1997 to almost 11 percent of districts in 1998. This increase suggests that at least some states and districts have been able to free up students' schedules for career-related courses.

How commonly are skill certificates awarded?

- C *Technical skill certificates have become more available, but are still relatively rare.* In 1998, about 45 percent of partnerships and 15 percent of all partnership schools gave, to at least some students, certificates that denote mastery of industry-specific skills identified by industry groups at the partnership-wide, regional, state, or national level. These figures reflect growth in the availability of skill certificates over 1997, when only 39 percent of partnerships and 13 percent of schools offered them. Despite the increasing prevalence, however, the proportion of schools remains low because (1) partnerships and schools do not appear to have made industry skill certificates a priority, and (2) many

partnership coordinators were unable to determine whether some of their member schools award such certificates.

- C *Certificates documenting general workplace readiness skills remain less common.* The legislation emphasizes the importance of providing students with “instruction in general workplace competencies, including instruction and activities related to developing positive work attitudes, and employability and participative skills.” However, credentials that certify student acquisition of these skills are less frequently awarded by partnerships (16 percent) than are technical skill certificates (45 percent). Only about 4 percent of partnership secondary schools were reported to have awarded workplace readiness certificates in SY 1997-1998, a figure similar to the percentage that awarded such certificates a year earlier.
- C *A growing number of students, but still relatively few, receive skill certificates.* Expansion in both the number of STWOA-funded partnerships and the proportion of them that offer technical skill certificates have contributed to increasing numbers of students reported as having received skill certificates in 1998 (about 74,000) as compared to 1997 (almost 50,000). The number of students receiving general workplace readiness credentials also grew, with much of the growth for both types of certificates coming from urban partnerships. Even so, in both 1997 and 1998 students who ever received either a technical skill or workplace readiness certificate represented just about 5 percent of all seniors in partnership schools.
- C *The prevalence of industry skill certificates varies by career area.* The vast majority of technical skill certificates were awarded to seniors completing career preparation programs in the business, engineering/industrial technology, and human services areas. Although the total number of students awarded certificates in each of these and other career areas increased, the average number of certified students per school fell slightly in all but business and human services clusters.

BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS

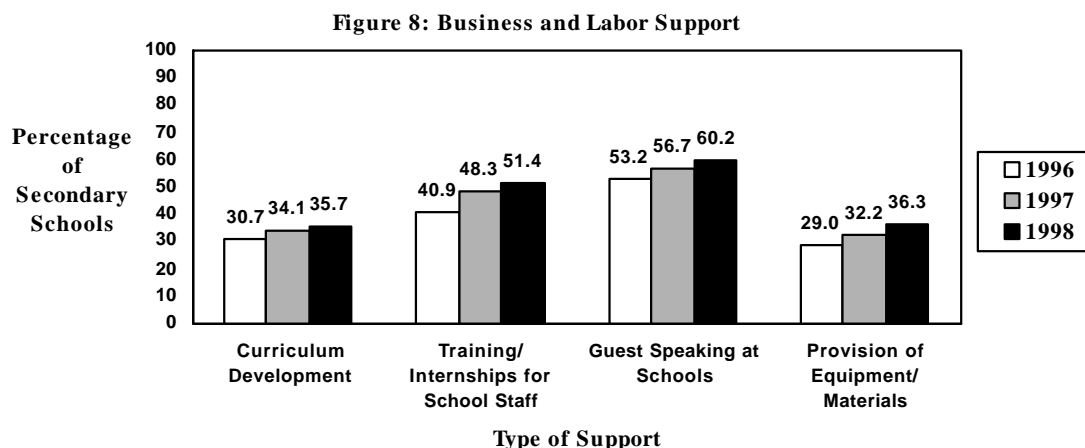
Table 14
Table 15

Creating central roles for employers and labor groups in STW systems is an important goal at the federal, state, and local levels. The involvement of these groups is expected to open opportunities for students to participate in work-based learning experiences, to offer new approaches and resources to address school reform challenges, and to strengthen ties between STW and broader workforce development strategies.

Firms, unions, and business/trade associations collaborate with schools in a variety of capacities beyond that of providing students workplace experiences. The LPS listed eight major categories of support that business and labor can provide to schools and asked coordinators to record (1) whether any partnership schools received each type of support, (2) how many schools did so, (3) the number of employers providing the support, and (4) the number of labor unions and other groups providing the support.

Trends in Implementation: Business and Labor Support

Business and labor support continues to grow, marking a key outcome of STW efforts. LPS data suggest that each year, higher proportions of partnership schools engage in cooperative efforts with business and labor. These include traditional activities, such as guest speaking, or others intended to develop links between the classroom and the workplace (Figure 8). Expansion of most types of business and labor support has tapered off slightly, in part because schools in newer partnerships are less likely to have these collaborative arrangements. Most of the growth has been within older, more established partnerships where, presumably, several years of STW promotion and relationship building is having an effect.



On a more detailed level, the 1998 LPS data provide responses to the following questions:

To what extent do business and labor work with schools directly?

- C *Virtually all partnerships receive some type of business and labor support.* As many as 98 percent of partnerships have schools engaged in some type of activity with business and labor. At least 60 percent of schools receive some kind of support, usually from multiple employers. An average of 2 to 15 firms are involved in each activity with each school that can provide counts of participating employers. While some labor union support is reported, businesses were the main source of assistance for schools.
- C *Expansion in business and labor support has slowed somewhat.* Collaboration between schools and employers continues to grow, but to a lesser degree than in earlier years. For example, the promotion and marketing of STW rose to 49 percent of secondary schools in 1998 from about 45 percent in 1997, but this type of support increased by almost twice as much the year before. The addition of new partnerships with less established ties to employers and unions, as well as diminished funding in some partnerships, may have contributed to the less expansive growth more recently.
- C *Business and labor support is increasing in rural and urban locales.* Suburban partnerships have made little progress in expanding employer work with schools, in contrast to partnerships in other geographic areas. For example, in 1998 employer-provided internships for school staff were offered in 50 percent of rural schools (up from 43 percent in 1997) and 52 percent of urban schools (up from 46 percent in 1997). The proportion of suburban schools receiving this and other forms of support changed little in recent years.

What are the most common types of support that business and labor provide?

- C *Guest speaking at schools remains most prevalent.* Employers, and sometimes unions, continue to help schools with traditional activities, such as guest speaking in

classrooms or assemblies and participating in career education days and other school events. The proportion of schools receiving this type of assistance grew from just under 57 percent in 1997 to about 60 percent in 1998.

- C *Employer-provided training or internships for school staff are increasingly available.* Experiences designed to broaden the workplace knowledge that teachers bring to the classroom--such as job shadowing and summer internships--are becoming a popular way for businesses to support STW schools. These activities were offered to over 51 percent of partnership schools in 1998, compared to 48 percent of schools in 1997. The reported number of employers participating in this activity rose to over 32,000 in 1998 from about 25,000 in 1997.
- C *Provision of material resources is less common than working with school staff, but is growing.* Many employers support STW development, by providing schools with equipment, space, or financial awards for teachers or students, and this form of assistance is expanding. For example, the donation of equipment and materials to schools grew from less than 32 percent of partnership schools in 1997 to over 36 percent in 1998. Still, this form of support is less prevalent than the assistance employers provide in working with school staff, such as guest speaking in classrooms or sponsoring teacher internships.

WORK-BASED LEARNING ACTIVITIES

Table 9
Table 16
Table 17
Table 18

STW proponents view work-based learning as essential to helping students prepare for careers. Work-based activities are intended to expose students to careers they might want to enter, motivate them to succeed in education, and help them apply and develop skills.

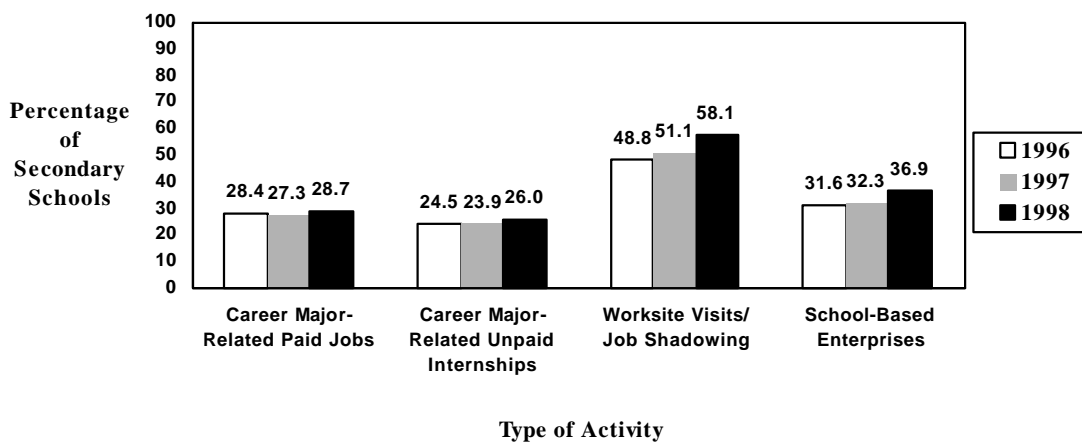
The STWOA recognizes a variety of work-based learning activities as appropriate for students' development. Job shadowing, school-sponsored (student) enterprises, on-the-job training, and basic work experience or internships of different durations each provide particular learning opportunities. However, the legislation emphasizes the benefits of an extended (preferably paid) program of training and work experience that is linked to students' career majors and that provides instruction related to all aspects of the industry in which students work.

Many STW partnerships have focused on recruiting employers and arranging different types of work-based learning activities. To assess the extent of these activities, the LPS asked coordinators to report for SY 1996-1997 the number of their secondary schools offering each of several types of workplace opportunities, the number of students participating, and the number of employers providing each type of opportunity. Coordinators also documented the characteristics of and participation in student enterprises. These usually “school-based enterprises” (SBEs) are defined as businesses that students operate to produce goods and services and market them to the school community or the general public.

Trends in Implementation: Work-Based Learning Activities

Work-based learning has become increasingly available to students, which probably reflects the priority that partnerships and their schools have placed on this important STW component. The most common--and fastest-growing--types of activities continue to be the short-term and less intensive ones, such as worksite visits and school-based enterprises (Figure 9). Longer and more skill-oriented activities, such as paid jobs and internships, are only slightly more prevalent across schools than in 1996, when the LPS began. Higher rates of expansion were evident among the older, more established partnerships that have had longer to recruit and solidify relationships with employers.

Figure 9: Work-Based Learning



The 1998 LPS offers insights into the following questions about work-based learning:

What kinds of school-based student enterprises are there, and who participates?

- C *Student enterprises are becoming more prevalent.* Nearly 37 percent of partnership secondary schools offered some type of SBE in 1998, up from 32 percent a year earlier. While student enterprises became more available across all types of locales (in rural, suburban, and urban partnerships), the most substantial expansion was in rural areas, where SBEs are often thought to substitute for workplace learning where employer partners are scarce.
- C *Task rotation and connection to class grades are increasingly common features.* A growing share of partnership schools provide SBE participants with broad exposure to careers or a link to classroom performance. Nearly 29 percent of schools in 1998, compared to 26 percent in 1997, offered school-based enterprises in which at least some students experience all aspects of the operation by rotating tasks and responsibilities. The proportion of partnership schools in which students' contribution to and performance in the enterprise affects their class grade also rose somewhat, from about 24 percent in 1997 to over 26 percent in 1998. Each of these features were available in about three-quarters of the schools that offer school-based enterprises.
- C *Business support of SBEs remains relatively constant.* Many student enterprises are run without the involvement of local businesses. In 1998, firms sponsored or guided student enterprises in about 19 percent of all partnership secondary schools (just over half of those with SBEs), compared to 17 percent of schools in 1997.
- C *SBEs tend to be broadly defined and include high numbers of students.* In 1998, the average number of students involved in SBEs was 61 (among schools that could report participation), up from 57 a year earlier. Urban partnerships have particularly high numbers of students participating in SBEs, with an average of 86 students per school. The SBEs in some schools include as many as 1,000 participants. These high student counts are an indication that schools may be including activities beyond traditionally defined student enterprises, such as school stores or banks, which typically involve no more than 25 students. Schools with many

participants may be counting more short-term, large-scale activities in their definitions of school-based enterprises.

- C *SBEs increasingly involve more than just vocational students.* Although SBEs have traditionally drawn students mostly from vocational programs, other kinds of students are increasingly becoming involved in these activities. In 1998, almost one-quarter of secondary schools reported that all or most participants in their SBEs were vocational students. However, nearly 16 percent of partnership schools included students from specific academic courses in SBEs, and nearly 15 percent included students from the general student population. Over the past few years, the proportion of schools that include other than vocational students has slowly increased.

To what extent are activities at worksites available, and to what extent are students participating in them?

- C *Lower-intensity workplace activities remain the most common.* Short-term, unpaid experiences that are not related to students' choice of a career major are more prevalent than other types of activities. For example, in 1998, worksite visits/job shadowing and community service were available in a higher proportion of partnership schools (58 percent and 36 percent, respectively) than were paid school year jobs (29 percent) and unpaid internships (26 percent) linked to students' career majors. In addition, more students participate in the less intensive activities, on average. Among these, community service expanded most--with availability rising from 31 percent of partnership schools in 1997 to 36 percent of schools in 1998, and the average number of students increasing from 40 to 70.
- C *Participation in paid jobs has grown, while participation in unpaid internships has declined somewhat.* The STWOA promotes career-focused programs of study linked to related work-based learning, with preference given to paid skill instruction and work experience. Consistent with this legislative priority, the average number of students participating in paid jobs during the school year increased to almost 24 students per school in 1998 from about 20 students per school in 1997. This increase has been accompanied by a decrease in participation in unpaid internships (from 21

students per school in 1997 to 16 students per school in 1998).

- C *Workplace activities are most common and growing most quickly in urban partnerships.* Not only do urban partnerships offer workplace activities in a higher proportion of schools than do rural and urban partnerships, but they also engage many more students in these activities. For example, 41 percent of urban partnership schools in 1998 offered paid jobs during the school year, compared to 28 percent of suburban and 25 percent of rural partnerships' schools. The average number of students participating in paid jobs in urban schools is 49 per school, compared with nearly 25 students per school in suburban and 13 students per school in rural partnerships. In addition, participation is expanding rapidly in urban areas. For example, worksite visits/job shadowing involved an average of over 110 students per urban partnership school in 1998, compared to about 70 students in 1997. These high levels of workplace activity probably reflect the larger school sizes and greater concentration of employers in urban areas.
- C *The availability of workplace activities for students in alternative education remains low.* Although nearly three-quarters of all partnerships in 1998 reported alternative education providers as members, relatively few partnerships (about one-third) reported workplace activity arranged by such providers. Where partnerships did document the workplace experiences of students in alternative education, they indicated that the distribution of these experiences was similar to that of students in comprehensive and vocational high schools--less intensive activities were most common. The proportion of alternative education providers offering workplace activities remained relatively stable from 1997 to 1998. However, the number of alternative education students and employers participating in many work-based activities fell during that period.

CHARACTERISTICS AND OUTCOMES OF STUDENTS IN INTENSIVE STW ACTIVITIES

Table 19
Table 20

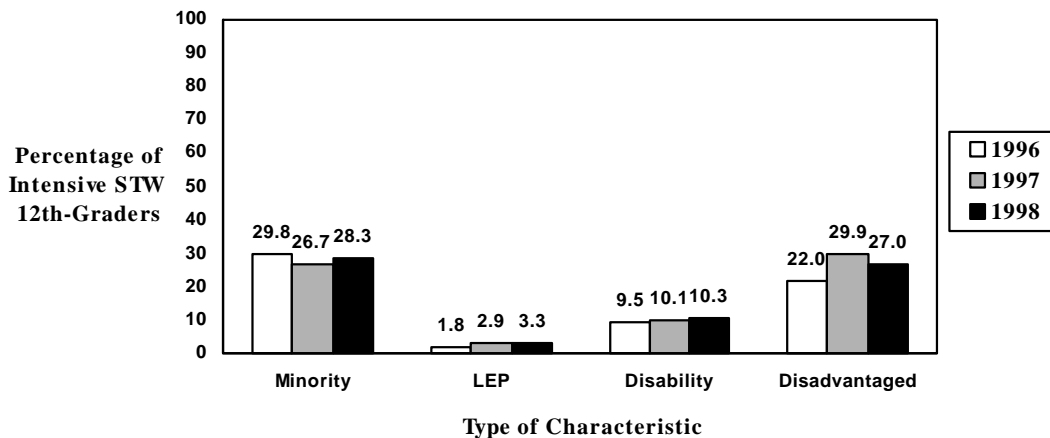
One goal of the STWOA is to enable large numbers of students from diverse backgrounds to have coherently related STW experiences that help them prepare for successful careers. That objective makes it important to examine who participates in STW components, and the extent to which this group progresses to postsecondary education and employment as STW systems develop.

LPS coordinators were asked to document the characteristics and outcomes of a specific group of students engaged in STW activities--12th-graders who participated during the school year in an extended job or internship connected to their choice of a career major. This group, termed "participants in intensive STW activities," was selected for the focus of data collection because: (1) they come closest to having the set of comprehensive experiences described in the STWOA, and (2) data collection on all or most students would not be feasible.

Trends in Implementation: Student Characteristics

There has been little consistent change in the characteristics of 12th-grade students involved in intensive STW activities over the three years of the LPS (Figure 10). With the exception of race/ethnicity, the characteristics of intensive STW participants are generally similar to those of other students in their partnership districts and in the nation as a whole. Although white students' participation in intensive STW activities is proportional to their enrollment in partnership districts, black students are overrepresented in STW activities, and Hispanic students are underrepresented.

Figure 10: Student Characteristics



Coordinators' responses to the 1998 LPS contained several findings relating to student characteristics and outcomes:

- Ⓒ *The racial/ethnic composition of seniors in intensive STW activities may differ somewhat from that of other students in their districts.* In 1998, 12th-graders involved in career majors with related work-based learning were about equally likely (60 percent) to be white as was the overall secondary student population in the partnerships reporting student participation (59 percent).⁹ However, Hispanic students are underrepresented among intensive STW participants; approximately 17 percent of participants in intensive STW activities were Hispanic, while almost one-quarter of all students in reporting districts were Hispanic. A factor in this disparity may be that limited English proficiency among recent immigrants is a barrier to participating in either school-related jobs or internships or in technology education, an emphasis of many STW initiatives. The differences may also be an artifact of the data, however. While partnership-reported intensive participants are seniors, available data on race/ethnicity for the general student population overall could not be separated for each grade level and thus are reported for all students in partnership high schools. Higher dropout rates among Hispanic students probably make it less likely that they could be counted by partnerships as seniors in intensive activities, unless STW participation was dramatically changing dropout rates among this group.

⁹These racial/ethnic distributions of participants in 1998 are quite different from those in 1997, which reflects in part the addition of two very large partnerships whose districts serve predominantly Hispanic students. If these two partnerships were not included in the 1998 calculations, the percentages of Hispanics among STW participants would decline from 17 to 7 percent, and among all students in their partnership districts from 25 to 10 percent. The percentage of white students would increase among intensive participants and students overall (to 72 percent and 71 percent, respectively), making the distributions similar to those in 1997. Regardless of whether this adjustment is made, however, in 1998 a pattern of overrepresentation of students from some racial/ethnic minority groups and underrepresentation among others remains the same.

The data also suggest that African Americans are overrepresented in intensive STW activities (almost 20 percent versus 13 percent of students overall). The greater participation of African American students relative to others in their districts is not easily explained.

- C *Intensive participants are generally similar to U.S. students overall in other characteristics.* In 1998, partnership coordinators reported for their students other demographic characteristics that are roughly consistent with estimates for the overall student population in the United States (National Assessment of Vocational Education 1994). However, intensive STW participants may be slightly less likely to be at risk than other U.S. students; about 3 percent are LEP, and just under 30 percent are classified as economically or educationally disadvantaged. In contrast, four to five percent of all U.S. students are LEP, and closer to one-third are disadvantaged.
- C *Most partnerships and schools still cannot report on student outcomes.* Although 51 percent of partnerships in 1998 could document the number of seniors in intensive STW activities, significantly fewer could report how many graduated from high school (36 percent) or made transitions to jobs (13 percent) or postsecondary education (22 percent). The proportion of schools that could report on these outcomes is much smaller. Thus, calculation of rates of transition to college or employment are premature, and outcomes data should be interpreted cautiously. Still, the overall proportion of partnerships and schools that could report student outcomes has increased since 1997.

REFERENCES

- Hulsey, Lara, and Marsha Silverberg. "The 1997 National Survey of Local School-to-Work Partnerships: Data Summary." Report submitted to the U.S. Department of Education. Princeton, NJ: Mathematica Policy Research, Inc., November 1998.
- National Assessment of Vocational Education. "Interim Report to Congress." Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement, January 1994.
- Silverberg, Marsha. "The First National Survey of Local School-to-Work Partnerships: Data Summary." Report submitted to the U.S. Department of Education. Princeton, NJ: Mathematica Policy Research, Inc., August 1997.

APPENDIX A

FALL 1998 LPS DATA TABLES

TABLE 1. PARTNERSHIP SIZE AND COMPOSITION IN FALL/WINTER 1998

Type of Institution/Entity ^a	Number of Partnerships with Each Entity	Number of Each Entity		Percent of Partnerships With Entity As	
		Total	Average Per Partnership	Lead Organization	Fiscal Agent
Education Institutions					
Local Education Agencies/Districts	1,021	6,747	6.6	32.0%	51.1%
High Schools	1,018	8,507	8.3	6.1%	6.4%
Middle Schools	940	8,048	7.9	0.0%	0.0%
Elementary Schools	949	22,784	22.3	0.2%	0.1%
Vocational High Schools	259	527	0.5	1.0%	1.2%
Area/Regional Vocational Districts/Centers	388	541	0.5	5.1%	6.1%
Intermediate or Regional Educational Service Districts	254	403	0.4	3.2%	7.5%
2-Year Postsecondary Institutions	900	1,410	1.4	5.3%	9.8%
4-Year Postsecondary Institutions	615	1,117	1.1	1.1%	1.7%
Alternative Education Providers	749	2,382	2.3	0.2%	0.3%
Other Educational Institutions	170	628	0.6	1.3%	1.9%
Training Institutions					
Proprietary Training Institutions	138	388	0.4	0.0%	0.0%
Registered Apprenticeship Agencies	287	600	0.6	0.0%	0.0%
JTPA/PIC Agencies	659	769	0.8	1.6%	3.2%
Other Training Institutions	113	186	0.2	0.1%	0.4%
Business and Labor					
Private Sector Firms	876	31,028	30.3	2.2%	0.4%
Business/Industry or Trade Associations	504	2,446	2.4	0.9%	0.5%
Chambers of Commerce	816	1,860	1.8	4.1%	2.1%
Labor Unions	619	1,377	1.3	0.0%	0.0%
Other Organizations					
Workforce Development Boards	583	734	0.7	2.3%	1.8%
Local/Regional/State Government Agencies	818	3,942	3.9	0.5%	1.8%
Community-based Organizations/Other Nonprofit	667	3,117	3.0	1.8%	1.8%
Parent/Student Representation	797	NA	NA	NA	NA
Other	638	638	0.6	0.9%	1.2%
No Single Lead Organization/Fiscal Agent Not Reported . . .				29.6%	1.1%

SOURCE: STW Local Partnership Survey, fall 1998.

^aMay include some double-counting across partnerships.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.

Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 2. REPRESENTATION ON GOVERNING BOARDS IN SY 1998-1999

Types of Members on Governing Board	Number of Partnerships with Each Type	Percent of Partnerships with Chairperson From Each Member Type ^a	Number of Each Member Type	
			Total	Average Per Partnership
Secondary School Districts				
LEA/Vocational District Administrators	854	29.1%	3,461	3.4
Individual School Administrators	611	7.5%	2,133	2.1
Academic Faculty	528	3.4%	2,286	2.2
Vocational Faculty	433	3.1%	1,110	1.1
Counselors	554	2.9%	1,486	1.5
Postsecondary Institutions				
Administrators	630	5.9%	1,223	1.2
Faculty	340	0.9%	584	0.6
Counselors	131	0.5%	175	0.2
Training institutions				
Proprietary Training Institutions	73	0.2%	155	0.2
Registered Apprenticeship Agencies	156	0.1%	309	0.3
JTPA/PIC Agencies	442	1.8%	541	0.5
Business and Labor				
Private Sector Firms	787	33.8%	6,395	6.3
Business Associations/Chambers of Commerce	669	10.3%	2,018	2.0
Labor Unions	463	1.1%	724	0.7
Other Organizations				
Alternative Education Providers	318	0.5%	462	0.5
Workforce Development Boards	377	2.2%	609	0.6
Local//Regional/State Government Agencies	615	3.4%	1,857	1.8
Community-Based Organizations/Other Nonprofit	449	2.2%	963	0.9
Parents	560	1.5%	NA	NA
Students	484	0.1%	NA	NA
Other	733	4.5%	3,807	3.7
No Governing Board/Chairperson Not Reported	109	18.9%		
Average Number of Board Members Overall	33.6			
Percentage of Partnerships with Employer Representatives as Majority of Board Members	6.5%			

SOURCE: STW Local Partnership Survey, fall 1998.

^aMay sum to more than 100% because partnerships often have more multiple chairpersons.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.

Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 3. CAREER AWARENESS AND DEVELOPMENT ACTIVITIES IN SY 1998-1999

	Activity Reported as Routinely Available In:					
	Secondary Schools		Postsecondary Institutions		Alternative Education Providers	
	Total Number	Percent of Secondary Schools	Total Number	Percent of Postsecondary Institutions	Total Number	Percent of Alternative Education Providers
Total Number of Institutions in Partnerships	9,575	100.0%	2,527	100.0%	2,382	100.0%
Total Number of Institutions Reporting on Career Awareness and Development Activities	7,767	81.1%	1,412	55.9%	1,268	53.2%
By Type of Approach/Activity:						
<i>Separate Career Awareness/Development Classes</i>	4,346	45.4%	787	31.1%	737	30.9%
<i>Separate Work Readiness Classes</i>	3,284	34.3%	590	23.3%	643	27.0%
<i>Activities Integrated Into Academic/Vocational Classes</i>	6,560	68.5%	986	39.0%	916	38.5%
<i>Development of Individual Student Plans</i>	5,356	55.9%	NA	NA	746	31.3%
<i>Career Interest Inventories</i>	6,598	68.9%	843	33.4%	881	37.0%
<i>Scheduled Use of Career Centers</i>	4,297	44.9%	786	31.1%	492	20.7%
<i>Individual Career Counseling</i>	6,221	65.0%	1,119	44.3%	904	38.0%
<i>Career Fairs</i>	5,238	54.7%	963	38.1%	541	22.7%

SOURCE: STW Local Partnership Survey, fall 1998.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 4. CAREER AWARENESS AND DEVELOPMENT ACTIVITY IN SY 1998-1999,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
<i>Separate Career Awareness/Development Classes</i>	83.3%	48.2%	87.9%	43.2%	91.8%	46.4%	85.8%	45.4%
<i>Separate Work Readiness Classes</i>	72.4%	35.8%	80.4%	31.6%	78.2%	41.1%	75.9%	34.3%
<i>Activities Integrated Into Academic/Vocational Classes</i>	96.1%	73.2%	96.5%	66.8%	93.6%	63.0%	95.9%	68.5%
<i>Development of Individual Student Course Plans</i>	87.6%	59.8%	89.0%	53.8%	86.4%	54.0%	87.9%	55.9%
<i>Career Interest Inventories</i>	94.6%	73.0%	95.2%	67.4%	92.7%	64.2%	94.5%	68.9%
<i>Scheduled Use of Career Centers</i>	72.2%	45.1%	84.9%	44.3%	81.8%	47.1%	77.8%	44.9%
<i>Individual Career Counseling</i>	92.2%	70.9%	93.3%	63.1%	85.5%	56.9%	91.8%	65.0%
<i>Career Fairs</i>	87.4%	59.2%	90.6%	51.7%	90.9%	54.7%	88.9%	54.7%

SOURCE: STW Local Partnership Survey, fall 1998.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 5. PROMOTING ACCESS TO SCHOOL-TO-WORK IN SY 1998-1999

Strategy	Percent of Partnerships Using Each Strategy for Specified Special Population Groups							
	Minority Students	Limited English Proficiency (LEP) Students	Students With Disabilities	Economically or Educationally Disadvantaged Students	Pregnant or Parenting Students	Out of School Youth	Males or Females With Regard to Non-Traditional Occupations	Academically Gifted/Talented Students
Partnership-Level Strategies								
<i>Representatives <u>required</u> on partnership governing board</i>	25.8%	17.3%	37.7%	34.9%	19.9%	28.3%	26.6%	22.5%
<i>Partnership grant funds used for special services, accommodations, or activities . . .</i>	38.7%	30.7%	51.1%	51.3%	34.6%	38.8%	42.6%	34.6%
<i>Training for business community on working with special populations</i>	23.0%	16.7%	37.4%	31.9%	19.8%	22.9%	25.5%	18.2%
School-Level Strategies								
<i>Materials/instruction in students' native (non-English) language</i>	NA	51.5%	NA	NA	NA	NA	NA	NA
<i>Culturally-specific curriculum materials . .</i>	49.2%	42.7%	NA	NA	NA	NA	61.0%	NA
<i>Interpreters</i>	NA	53.3%	63.0%	NA	NA	NA	NA	NA
<i>Targeted promotional materials</i>	57.5%	45.7%	64.7%	63.0%	58.9%	50.1%	69.3%	55.6%
<i>Special career guidance</i>	67.5%	60.8%	85.8%	81.4%	76.1%	63.5%	76.6%	70.6%
<i>Special tutoring</i>	60.2%	63.0%	80.6%	74.8%	67.7%	51.4%	53.5%	54.5%
<i>Regularly scheduled progress evaluations</i>	62.9%	60.6%	82.2%	75.3%	67.0%	50.6%	59.7%	65.2%

SOURCE: STW Local Partnership Survey, fall 1998.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 6. DEFINITION AND PREVALENCE OF CAREER MAJORS IN SY 1998-1999,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Career Majors in Use (All Definitions)	75.0%	48.9%	83.9%	50.5%	87.3%	58.2%	79.5%	50.9%
Characteristics of Career Majors								
<i>Written Course Sequence</i>	73.0%	44.2%	80.6%	46.5%	84.5%	54.1%	76.9%	46.6%
<i>Some Students Grouped by Career Area</i>	54.1%	29.5%	66.4%	32.4%	70.9%	38.8%	60.3%	32.2%
<i>All Students Grouped by Career Area</i>	22.0%	6.9%	27.4%	5.5%	33.6%	8.7%	25.2%	6.4%
<i>Instruction Provided on Issues and Pathways Related to Career Area</i>	52.6%	23.7%	63.4%	26.5%	71.8%	37.8%	58.6%	26.9%
<i>Extended Workplace Activity Required</i>	49.3%	20.9%	65.3%	24.5%	73.6%	37.0%	57.7%	24.8%

SOURCE: STW Local Partnership Survey, fall 1998.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 7. INDUSTRY EMPHASIS OF CAREER MAJORS IN SY 1998-1999

Career Major Categories	Percent of Partnerships With Career Major in Specified Category ^a	Percent of Secondary Schools With Career Major in Specified Category	12th Graders Selecting Career Major in Specified Category	
			Total Number	As Percentage of All 12th Graders in Partnership Schools
<i>Agriculture/Natural Resources</i>	64.7%	25.9%	13,967	0.8%
<i>Arts/Communications/Humanities</i>	64.8%	29.3%	26,138	1.5%
<i>Business/Marketing/Finance</i>	75.5%	39.6%	64,560	3.6%
<i>Engineering/Industrial Technology</i>	71.1%	33.0%	47,108	2.7%
<i>Health</i>	68.8%	29.4%	25,215	1.4%
<i>Human Services</i>	63.6%	28.3%	30,782	1.7%
Percent of Secondary Schools Able to Provide Counts of Students Selecting Career Majors		43.8%		

SOURCE: STW Local Partnership Survey, fall 1998 and NCES Common Core Database, 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 8. CURRICULUM INTEGRATION STRATEGIES IN SY 1998-1999,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Strategy	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions
<i>Commercial Applied Academic Packages</i>	56.0%	24.0%	45.9%	19.4%	47.4%	27.2%	49.6%	22.4%
<i>School-Developed Applied Units/Projects</i>	60.5%	34.0%	59.2%	33.2%	62.9%	32.5%	60.1%	33.4%
<i>State-Developed Applied Curricula</i>	43.5%	17.2%	40.2%	14.2%	40.6%	15.3%	41.4%	15.5%
<i>"All Aspects of the Industry" in Vocational Courses</i>	51.7%	35.5%	46.1%	28.2%	48.8%	29.4%	48.4%	31.2%
<i>"All Aspects of the Industry" in Academic Courses</i>	45.1%	29.6%	42.8%	25.5%	50.4%	31.0%	44.6%	27.9%
<i>Academic-Vocational Team Teaching</i>	21.8%	11.3%	22.4%	9.9%	26.9%	13.5%	22.8%	11.0%
<i>Teacher Group Collaboration on Career- Related Curriculum Units</i>	26.5%	NA	26.5%	NA	38.5%	NA	28.1%	NA
<i>Common Teacher Planning Period for Teachers in Same Major/Pathway</i>	15.7%	NA	14.4%	NA	25.3%	NA	16.3%	NA
<i>Block Scheduling</i>	31.9%	NA	27.6%	NA	37.5%	NA	30.4%	NA
<i>Secondary/College Faculty Collaboration on New or Revised Curricula</i>	26.1%	29.0%	25.9%	25.3%	26.2%	25.4%	26.0%	26.8%
<i>Faculty/Employer Joint Development of Curricula for Classrooms or Worksites</i>	31.9%	33.2%	32.2%	28.4%	35.6%	31.5%	32.5%	30.7%

SOURCE: STW Local Partnership Survey, fall 1998.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 9. STUDENT ENTERPRISES: CHARACTERISTICS AND PARTICIPATION IN SY 1997-1998
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Features of Student Enterprises	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Student Enterprises in Operation (All Types)	72.2%	38.8%	81.2%	34.8%	83.6%	40.3%	76.6%	36.9%
Majority Participation by Student Group From:								
<i>Specific Occupational Program(s)</i>	55.6%	22.2%	67.2%	22.4%	69.1%	26.1%	61.2%	22.8%
<i>Specific Academic Course(s)</i>	44.8%	15.0%	58.9%	15.3%	58.2%	19.4%	51.3%	15.7%
<i>Special Education or Students with Disabilities</i>	23.9%	6.3%	35.5%	6.2%	41.8%	7.8%	30.0%	6.5%
<i>Career Interest Club(s)</i>	31.1%	9.8%	43.3%	10.3%	41.8%	9.6%	36.7%	10.0%
<i>General Student Body</i>	44.1%	18.2%	49.5%	12.4%	46.4%	13.5%	46.2%	14.6%
Features of Student Enterprises:								
<i>Participants Experience All Aspects of Operation</i>	65.2%	30.8%	75.0%	27.1%	77.3%	30.6%	70.0%	28.9%
<i>Participation Affects Class Grade</i>	61.7%	27.2%	71.2%	25.0%	71.8%	28.9%	66.2%	26.3%
<i>Local Businesses Provide Support</i>	48.1%	18.7%	65.9%	17.7%	63.6%	22.6%	56.2%	18.7%
<i>Participants Receive Wages/Share of Profits</i>	28.7%	9.8%	40.6%	8.0%	43.6%	10.8%	34.6%	9.0%
Percent of Secondary Schools That Can Provide Counts of Student Enterprise Participants SY 1997-1998		27.0%		21.0%		23.7%		23.5%
Total Number of Students Participating in Student Enterprises SY 1997-1998		46,926		65,258		26,114		138,298
Average Number of Students Per Partnership School Reporting Counts SY 1997-1998		50.4		64.2		86.2		61.5

SOURCE: STW Local Partnership Survey, fall 1998.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.

Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 10. SECONDARY-POSTSECONDARY LINKAGES IN SY 1998-1999,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Linkage	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools
<i>Share Labor Market Information</i>	45.9%	47.6%	47.6%	43.3%	48.9%	39.9%	47.3%	44.5%
<i>Share Employer Networks/Contacts</i>	46.9%	46.9%	47.0%	44.5%	46.0%	42.1%	46.9%	45.1%
<i>Joint Advisory Committees</i>	35.6%	40.5%	32.2%	36.6%	34.1%	33.1%	33.8%	37.6%
<i>Share Equipment</i>	26.9%	37.5%	19.4%	29.0%	20.7%	25.4%	22.2%	31.9%
<i>Joint Staff Development</i>	36.1%	38.5%	32.2%	30.4%	38.7%	30.2%	34.4%	33.6%
<i>Common Cooperative Education Standards</i>	30.9%	31.8%	31.0%	26.9%	34.4%	27.5%	31.4%	28.9%
<i>Agreements Allowing Dual Enrollment</i>	58.8%	57.5%	56.3%	47.5%	53.0%	43.9%	56.6%	50.9%
<i>Articulation Agreement Granting College Credit or Advanced Standing for Secondary School Coursework</i>	57.2%	58.5%	57.1%	51.2%	56.7%	48.4%	57.2%	53.7%
<i>Articulation Agreements Granting College Credit for High School Work-Based Learning . .</i>	NA	19.4%	NA	22.2%	NA	19.3%	NA	19.7%

SOURCE: STW Local Partnership Survey, fall 1998.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 11. CHANGES IN GRADUATION REQUIREMENTS SINCE JULY 1994

New Requirements	Percent of Partnerships	Percent of All Partnership Districts
Academic Requirements		
<i>Increased Number of Academic Credits Required</i>	68.2%	34.5%
<i>Increased Number of Semesters/Quarters of Math Required</i>	54.9%	25.4%
<i>Increased Level of Math Required</i>	53.2%	22.6%
<i>Increased Number of Semesters/Quarters of Science Required</i>	48.5%	20.0%
<i>Increased Number of Semesters/Quarters of English Required</i>	25.2%	8.7%
<i>Increased Number of Semesters/Quarters of Social Studies Required</i>	32.2%	12.4%
<i>Increased Number of Semesters/Quarters of Foreign Language Required</i>	17.4%	6.6%
<i>Requirement to Pass Basic Proficiency Exam</i>	32.4%	13.8%
<i>Requirement to Earn a Certificate of Initial Mastery</i>	7.6%	1.9%
<i>Elimination of Separate Diploma Requirements for College-Bound and Other Students</i>	14.4%	6.6%
<i>Introduction of Exam-Based Diploma</i>	12.0%	5.3%
Career/Work-Based Requirements		
<i>Requirement That Students Select a Career Major</i>	34.5%	10.7%
<i>Community Service Requirement</i>	29.2%	7.1%
<i>Technology Education or Vocational Requirement</i>	39.7%	12.0%
<i>Required Career Development Course</i>	35.9%	10.0%
<i>Required Work-Readiness Course</i>	24.3%	6.7%
Other		
<i>Requirement That Students Complete a Portfolio</i>	39.8%	14.7%
<i>Requirement to Complete Senior Project</i>	24.3%	8.1%
<i>Requirement to Pass Senior Exit Interview</i>	17.2%	3.8%

SOURCE: STW Local Partnership Survey, fall 1998.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 12. TECHNICAL SKILL AND WORKPLACE READINESS CERTIFICATES IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Industry-Specific Skill Certificates Awarded in SY 1997-1998				
<i>Percent of Partnerships Awarding Skill Certificates</i>	36.5%	57.3%	43.6%	44.8%
<i>Percent of Secondary Schools Awarding Skill Certificates</i>	14.2%	14.7%	15.5%	14.6%
<i>Percent of Secondary Schools Recording Certification on Student Transcripts</i>	5.2%	3.6%	3.8%	4.2%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Skill Certificates .</i>	12.4%	10.5%	9.2%	11.0%
Seniors Who Received Skill Certificates in SY 1997-1998				
<i>Total Number</i>	17,705	41,011	15,503	74,219
<i>As a Percent of All Seniors in Partnership Schools</i>	6.1%	3.6%	4.6%	4.2%
Workplace Readiness Certificates Awarded in SY 1997-1998				
<i>Percent of Partnerships Awarding Workplace Readiness Certificates</i>	13.5%	20.2%	16.4%	16.2%
<i>Percent of Secondary Schools Awarding Workplace Readiness Certificates</i>	4.0%	3.6%	5.9%	4.0%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Workplace Readiness Certificates</i>	2.9%	2.5%	2.4%	2.6%
Seniors Who Received Workplace Readiness Certificates in SY 1997-1998				
<i>Total Number</i>	3,960	5,787	1,485	11,232
<i>As a Percent of All Seniors in Partnership Schools</i>	1.4%	0.5%	0.4%	0.6%

SOURCE: STW Local Partnership Survey, fall 1998 and NCES Common Core Database, 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 13. INDUSTRY EMPHASIS OF TECHNICAL SKILL CERTIFICATES IN SY 1997-1998

Career Area	Percent Awarded Skill Certificates		Number of 12th Graders Received Skill Certificates	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Students Receiving
<i>Agriculture/Natural Resources</i>	18.7%	4.0%	2,835	2.7
<i>Arts/Communication/Humanities</i>	14.8%	2.9%	2,472	2.3
<i>Business/Marketing/Finance</i>	32.0%	8.4%	23,151	22.0
<i>Engineering/Industrial Technology</i>	32.5%	7.6%	15,685	14.9
<i>Health</i>	30.3%	7.1%	7,374	7.0
<i>Human Services</i>	21.8%	5.0%	11,776	11.2

SOURCE: STW Local Partnership Survey, fall 1998.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 14. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1997-1998

Type of Support Provided by Business/Labor	Percent Received Support		Number of Employers Provided Support		Number of Labor Unions Provided Support	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Supporting Employers	Total	Average Per School Reporting Counts of Supporting Unions
Working With School Staff						
<i>Curriculum Development</i>	74.4%	35.7%	21,609	4.2	1,012	0.2
<i>Promotion/Marketing STW</i>	89.2%	49.0%	37,924	7.4	985	0.2
<i>Training/Internships for School Staff</i>	87.9%	51.4%	32,181	6.3	865	0.2
<i>Guest Speaking at Schools</i>	94.9%	60.2%	74,389	14.5	1,750	0.3
Providing Material Resources						
<i>Provide Equipment</i>	80.7%	36.3%	11,118	2.2	478	0.1
<i>Loan Office Space</i>	62.5%	23.2%	7,926	1.5	220	0.0
<i>Provide Student Awards</i>	77.7%	35.5%	14,790	2.9	525	0.1
<i>Provide Teacher Stipends</i>	40.3%	13.8%	2,964	0.6	116	0.0
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions		53.4%				

SOURCE: STW Local Partnership Survey, fall 1998.

^aThe number of partnerships havin at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 15. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Support Provided by Business/Labor	Percent of Secondary Schools Received Support In:			
	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Working With School Staff				
<i>Curriculum Development</i>	32.7%	36.4%	41.0%	35.7%
<i>Promotion/Marketing STW</i>	53.5%	46.0%	48.5%	49.0%
<i>Training/Internships for School Staff</i>	50.0%	52.2%	51.6%	51.4%
<i>Guest Speaking at Schools</i>	62.5%	58.3%	61.5%	60.2%
Providing Material Resources				
<i>Provide Equipment</i>	37.2%	34.8%	39.6%	36.3%
<i>Loan Office Space</i>	21.4%	23.0%	29.1%	23.2%
<i>Provide Student Awards</i>	39.6%	32.1%	37.6%	35.5%
<i>Provide Teacher Stipends</i>	13.3%	14.4%	13.4%	13.8%
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions	61.2%	47.3%	56.0%	53.4%

SOURCE: STW Local Partnership Survey, fall 1998.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

TABLE 16. WORKPLACE ACTIVITY: AVAILABILITY AND STUDENT PARTICIPATION IN SY 1997-1998

Type of Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Secondary Schools	Total Number	Average Per School Reporting Counts of Students Participating	Total Number	Average Per School Reporting Counts of Employers Participating
Related to Chosen Career Major/Pathway						
<i>Paid Jobs During School Year</i>	63.0%	28.7%	99,959	23.6	33,151	7.8
<i>Unpaid Internships/Jobs During School Year</i>	65.1%	26.0%	68,119	16.1	19,537	4.6
<i>Paid Summer Jobs</i>	53.8%	20.6%	42,259	10.0	9,710	2.3
<i>Unpaid Summer Internships/Jobs</i>	33.2%	10.3%	4,016	0.9	2,093	0.5
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	91.8%	58.1%	317,098	74.9	76,802	18.1
<i>Community Service/Volunteer Work</i>	78.1%	35.8%	294,583	69.6	22,281	5.3
<i>Workplace Experience Not Related to Career Major</i>	68.6%	30.3%	86,354	20.4	23,749	5.6
<i>Assignment to a Workplace Mentor</i>	54.5%	20.4%	49,176	11.6	14,452	3.4
Percent of Secondary Schools Able to Provide Counts of Students Participating in Workplace Activities		44.2%				

SOURCE: STW Local Partnership Survey, fall 1998.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 17. AVAILABILITY OF WORKPLACE ACTIVITY IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Workplace Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts
Related to Career Major								
<i>Paid Jobs During School Year</i>	25.0%	13.4	28.2%	24.7	41.0%	49.0	28.7%	23.6
<i>Unpaid Internships/Jobs During School Year</i>	25.9%	9.9	24.6%	17.0	31.9%	30.4	26.0%	16.1
<i>Paid Summer Jobs</i>	16.4%	5.2	19.5%	5.3	36.3%	38.2	20.6%	10.0
<i>Unpaid Summer Internships/Jobs</i>	7.5%	0.7	10.7%	1.1	16.6%	1.4	10.3%	0.9
Not Necessarily Related to Career Major								
<i>Worksite Visits/Job Shadowing</i>	61.3%	67.9	55.6%	69.3	59.4%	112.8	58.1%	74.9
<i>Community Service/Volunteer Work</i>	36.7%	35.7	32.3%	56.2	47.3%	207.8	35.8%	69.6
<i>Workplace Experience Not Related to Career Major</i>	32.3%	18.1	28.1%	21.1	33.6%	24.8	30.3%	20.4
<i>Workplace Mentor</i>	19.6%	7.6	19.1%	15.7	27.3%	9.7	20.4%	11.6

SOURCE: STW Local Partnership Survey, fall 1998.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 18. WORKPLACE ACTIVITY ARRANGED BY ALTERNATIVE EDUCATION PROVIDERS:
AVAILABILITY AND PARTICIPATION IN SY 1997-1998**

Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Alternative Education Providers	Total Number	Average Number Per Provider Reporting Counts of Students Participating	Total Number	Average Number Per Provider Reporting Counts of Employers Participating
Related to Chosen Career Major						
<i>Paid Jobs During School Year</i>	20.9%	15.4%	3,494	7.3	1,642	3.4
<i>Unpaid Internships/Jobs During School Year</i>	18.1%	13.4%	4,144	8.7	1,358	2.8
<i>Paid Summer Jobs</i>	15.3%	10.6%	3,328	6.9	1,263	2.6
<i>Unpaid Summer Internships/Jobs</i>	7.0%	5.3%	481	1.0	239	0.5
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	32.5%	25.2%	13,741	28.7	4,437	9.3
<i>Community Service/Volunteer Work</i>	26.8%	19.5%	8,405	17.5	1,727	3.6
<i>Workplace Experience Not Related to Career Major</i>	22.4%	18.0%	6,750	14.1	2,890	6.0
<i>Assignment to a Workplace Mentor</i>	15.0%	9.5%	2,751	5.7	1,456	3.0
Percent of Alternative Education Providers Able to Provide Counts of Students Participating in Workplace Activities						
		20.1%				

SOURCE: STW Local Partnership Survey, fall 1998.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 19. CHARACTERISTICS OF SY 1997-1998 SENIORS IN INTENSIVE STW ACTIVITIES^a

Student Characteristics	12th Graders in Intensive STW Activities	All Secondary Students in Partnerships Reporting on Intensive STW Participation
Total Number of 12th Graders	104,649	1,157,808
Race/Ethnicity (Percent of Total)		
<i>White</i>	59.8%	58.9%
<i>Black</i>	19.8%	12.5%
<i>Hispanic</i>	16.7%	24.8%
<i>Native American/Alaskan Native</i>	1.4%	1.1%
<i>Asian/Pacific Islander</i>	1.6%	2.7%
<i>Unknown</i>	0.7%	
Other Characteristics (Percent of Total)		
<i>Female</i>	49.2%	na
<i>Limited English Proficiency</i>	3.3%	na
<i>Students with Disabilities</i>	10.3%	na
<i>Economically/Educationally Disadvantaged</i>	27.0%	na
<i>Academically Gifted and Talented</i>	5.9%	na
Percent of Partnerships Able to Report Student Characteristics	39.1%	

SOURCE: STW Local Partnership Survey, fall 1998.

na = Not available

^aIntensive STW activities include paid or unpaid jobs/internships held during the school year that are related to a student's chosen career major.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 20. OUTCOMES FOR SY 1997-1998 PARTICIPANTS IN INTENSIVE STW ACTIVITIES

	Percent Reporting Outcomes		Number of Students Reported	
	Partnerships	Secondary Schools	Total	Average Per Reporting School
Number of 12th Grade Students in Intensive STW Activities	50.7%	32.7%	90,723	17.3
Student Outcomes^a				
<i>Graduated from High School in 1998</i>	36.0%	13.3%	53,976	10.3
<i>Entered Employment After High School Related to Career Major</i>	12.6%	3.4%	4,751	0.9
<i>Entered Postsecondary Education/Training:</i>	21.5%	5.8%	25,472	4.9
<i>Four-Year College</i>	19.1%		12,077	
<i>Two-Year College</i>	19.8%		11,210	
<i>Vocational Training</i>	11.9%		1,045	
<i>Proprietary School</i>	2.9%		154	
<i>Registered Apprenticeship</i>	5.0%		214	
<i>Armed Forces</i>	12.2%		772	

SOURCE: STW Local Partnership Survey, fall 1998.

^aRates of transition (e.g., graduation rates, postsecondary enrollment rate) cannot be computed from the figures in this table because particular outcomes may be reported for varying numbers of partnership schools.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

APPENDIX B

FALL 1997 LPS DATA TABLES

TABLE 1. PARTNERSHIP SIZE AND COMPOSITION IN FALL/WINTER 1997

Type of Institution/Entity ^a	Number of Partnerships with Each Entity	Number of Each Entity		Percent of Partnerships With Entity As	
		Total	Average Per Partnership	Lead Organization	Fiscal Agent
Education Institutions					
Local Education Agencies/Districts	995	6,453	6.5	36.7%	51.6%
High Schools	994	8,184	8.2	6.9%	5.8%
Middle Schools	867	7,101	7.1	0.1%	0.0%
Elementary Schools	867	20,765	20.8	0.0%	0.1%
Vocational High Schools	238	458	0.5	0.7%	0.8%
Area/Regional Vocational Districts/Centers	352	537	0.5	5.4%	6.2%
Intermediate or Regional Educational Service Districts	256	339	0.3	3.0%	7.0%
2-Year Postsecondary Institutions	882	1,412	1.4	6.1%	10.5%
4-Year Postsecondary Institutions	600	1,106	1.1	0.6%	1.3%
Alternative Education Providers	725	2,524	2.5	0.2%	0.2%
Other Educational Institutions	114	539	0.5	0.9%	1.1%
Training Institutions					
Proprietary Training Institutions	154	434	0.4	0.0%	0.0%
Registered Apprenticeship Agencies	269	529	0.5	0.0%	0.0%
JTPA/PIC Agencies	683	781	0.8	2.1%	4.0%
Other Training Institutions	69	211	0.2	0.0%	0.3%
Business and Labor					
Private Sector Firms	836	26,807	26.9	1.3%	0.2%
Business/Industry or Trade Associations	479	3,947	4.0	0.7%	0.3%
Chambers of Commerce	804	1,844	1.8	3.3%	2.2%
Labor Unions	611	1,233	1.2	0.0%	0.0%
Other Organizations					
Workforce Development Boards	528	674	0.7	2.2%	1.1%
Local/Regional/State Government Agencies	810	3,601	3.6	0.6%	1.6%
Community-based Organizations/Other Nonprofit . .	621	2,708	2.7	2.1%	2.2%
Parent/Student Representation	755	NA	NA	NA	NA
Other	586	586	0.6	1.0%	0.8%
No Single Lead Organization/Fiscal Agent Not Reported				25.2%	2.6%

SOURCE: STW Local Partnership Survey, fall 1997.

^aMay include some double-counting across partnerships.

NA = Not Applicable

NOTE: Secondary schools include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 2. REPRESENTATION ON GOVERNING BOARDS IN SY 1997-1998

Types of Members on Governing Board	Number of Partnerships with Each Type	Percent of Partnerships with Chairperson From Each Member Type ^a	Number of Each Member Type	
			Total	Average Per Partnership
Secondary School Districts				
LEA/Vocational District Administrators	801	28.0%	3,111	3.1
Individual School Administrators	564	5.5%	1,937	1.9
Academic Faculty	501	3.1%	2,118	2.1
Vocational Faculty	433	3.8%	1,067	1.1
Counselors	540	3.6%	1,257	1.3
Postsecondary Institutions				
Administrators	617	5.7%	1,138	1.1
Faculty	336	1.5%	683	0.7
Counselors	132	0.3%	178	0.2
Training institutions				
Proprietary Training Institutions	73	0.1%	102	0.1
Registered Apprenticeship Agencies	146	0.1%	237	0.2
JTPA/PIC Agencies	469	2.1%	584	0.6
Business and Labor				
Private Sector Firms	755	29.9%	5,933	5.9
Business Associations/Chambers of Commerce . . .	650	9.2%	1,765	1.8
Labor Unions	459	0.8%	680	0.7
Other Organizations				
Alternative Education Providers	319	0.4%	458	0.5
Workforce Development Boards	317	2.1%	530	0.5
Local//Regional/State Government Agencies	607	2.8%	1,689	1.7
Community-Based Organizations/Other Nonprofit . .	425	1.7%	929	0.9
Parents	538	1.4%	NA	NA
Students	466	0.1%	NA	NA
Other	712	4.5%	3,477	3.5
No Governing Board/Chairperson Not Reported	124	23.8%		
Average Number of Board Members Overall	30.2			
Percentage of Partnerships with Employer Representatives as Majority of Board Members	6.5%			

SOURCE: STW Local Partnership Survey, fall 1997.

^aMay sum to more than 100% because partnerships often have more multiple chairpersons.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 3. CAREER AWARENESS AND DEVELOPMENT ACTIVITIES IN SY 1997-1998

	Activity Reported as Routinely Available In:					
	Secondary Schools		Postsecondary Institutions		Alternative Education Providers	
	Total Number	Percent of Secondary Schools	Total Number	Percent of Postsecondary Institutions	Total Number	Percent of Alternative Education Providers
Total Number of Institutions in Partnerships	9,179	100.0%	2,518	100.0%	2,524	100.0%
Total Number of Institutions Reporting on Career Awareness and Development Activities	7,179	78.2%	1,332	52.9%	1,501	59.5%
By Type of Approach/Activity:						
<i>Separate Career Awareness/Development Classes</i>	3,897	42.5%	696	27.6%	772	30.6%
<i>Separate Work Readiness Classes</i>	2,797	30.5%	526	20.9%	607	24.0%
<i>Activities Integrated Into Academic/Vocational Classes</i>	5,692	62.0%	894	35.5%	810	32.1%
<i>Development of Individual Student Plans</i>	4,618	50.3%	NA	NA	856	33.9%
<i>Career Interest Inventories</i>	5,913	64.4%	744	29.5%	916	36.3%
<i>Scheduled Use of Career Centers</i>	3,686	40.2%	699	27.8%	440	17.4%
<i>Individual Career Counseling</i>	5,204	56.7%	923	36.7%	983	38.9%
<i>Career Fairs</i>	4,422	48.2%	800	31.8%	455	18.0%

SOURCE: STW Local Partnership Survey, fall 1997.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 4. CAREER AWARENESS AND DEVELOPMENT ACTIVITY IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
<i>Separate Career Awareness/Development Classes</i>	79.8%	46.2%	79.6%	39.3%	85.8%	44.2%	80.5%	42.5%
<i>Separate Work Readiness Classes</i>	67.5%	31.2%	72.5%	27.3%	78.0%	39.6%	70.6%	30.5%
<i>Activities Integrated Into Academic/Vocational Classes</i>	92.4%	66.9%	91.0%	59.3%	93.7%	59.5%	92.1%	62.0%
<i>Development of Individual Student Course Plans</i>	81.7%	53.1%	87.4%	48.9%	85.8%	48.5%	84.3%	50.3%
<i>Career Interest Inventories</i>	92.6%	67.6%	92.4%	63.4%	93.7%	60.4%	92.7%	64.4%
<i>Scheduled Use of Career Centers</i>	69.5%	37.3%	79.0%	41.5%	81.9%	42.6%	74.4%	40.2%
<i>Individual Career Counseling</i>	87.0%	63.3%	84.6%	54.0%	83.5%	50.0%	85.7%	56.7%
<i>Career Fairs</i>	80.5%	51.9%	82.6%	46.2%	82.7%	45.9%	81.6%	48.2%

SOURCE: STW Local Partnership Survey, fall 1997

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 5. PROMOTING ACCESS TO SCHOOL-TO-WORK IN SY 1997-1998

Strategy	Percent of Partnerships Using Each Strategy for Specified Special Population Groups							
	Minority Students	Limited English Proficiency (LEP) Students	Students With Disabilities	Economically or Educationally Disadvantaged Students	Pregnant or Parenting Students	Out of School Youth	Males or Females With Regard to Non-Traditional Occupations	Academically Gifted/Talented Students
Partnership-Level Strategies								
<i>Representatives <u>required</u> on partnership governing board</i>	26.9%	15.6%	37.7%	36.0%	21.0%	29.6%	28.8%	22.2%
<i>Partnership grant funds used for special services, accommodations, or activities</i>	36.7%	27.5%	49.4%	50.3%	31.0%	39.2%	41.4%	31.9%
<i>Training for business community on working with special populations</i>	20.7%	15.1%	35.1%	29.4%	18.2%	21.5%	23.6%	16.5%
School-Level Strategies								
<i>Materials/instruction in students' native (non-English) language</i>	NA	45.7%	NA	NA	NA	NA	NA	NA
<i>Culturally-specific curriculum materials</i>	44.3%	37.6%	NA	NA	NA	NA	54.2%	NA
<i>Interpreters</i>	NA	48.9%	58.0%	NA	NA	NA	NA	NA
<i>Targeted promotional materials</i>	51.8%	39.6%	59.6%	57.0%	49.5%	45.2%	62.8%	49.4%
<i>Special career guidance</i>	61.2%	54.2%	81.2%	73.8%	69.6%	59.7%	71.2%	64.5%
<i>Special tutoring</i>	53.9%	57.9%	77.0%	70.8%	62.4%	48.3%	46.9%	48.6%
<i>Regularly scheduled progress evaluations</i>	56.3%	54.9%	76.9%	68.3%	59.6%	46.0%	55.1%	57.3%

SOURCE: STW Local Partnership Survey, fall 1997.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

**TABLE 6. DEFINITION AND PREVALENCE OF CAREER MAJORS IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Career Majors in Use (All Definitions)	66.1%	42.0%	78.7%	46.1%	87.4%	54.2%	73.3%	45.8%
Characteristics of Career Majors								
<i>Written Course Sequence</i>	64.8%	37.5%	75.6%	41.7%	85.8%	50.9%	71.3%	41.6%
<i>Some Students Grouped by Career Area</i>	49.4%	26.0%	63.6%	29.6%	73.2%	36.4%	57.5%	29.3%
<i>All Students Grouped by Career Area</i>	18.3%	5.8%	26.6%	5.3%	31.5%	6.9%	22.9%	5.7%
<i>Instruction Provided on Issues and Pathways Related to Career Area</i>	46.3%	20.6%	60.2%	23.4%	70.9%	34.5%	54.4%	24.0%
<i>Extended Workplace Activity Required</i>	48.4%	19.9%	62.5%	23.8%	73.2%	33.8%	56.6%	23.9%

SOURCE: STW Local Partnership Survey, fall 1997.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 7. INDUSTRY EMPHASIS OF CAREER MAJORS IN SY 1997-1998

Career Major Categories	Percent of Partnerships With Career Major in Specified Category ^a	Percent of Secondary Schools With Career Major in Specified Category	12th Graders Selecting Career Major in Specified Category	
			Total Number	As Percentage of All 12th Graders in Partnership Schools
<i>Agriculture/Natural Resources</i>	55.1%	21.8%	11,415	0.8%
<i>Arts/Communications/Humanities</i>	58.0%	24.7%	19,412	1.4%
<i>Business/Marketing/Finance</i>	67.8%	35.1%	45,382	3.3%
<i>Engineering/Industrial Technology</i>	66.6%	30.2%	32,315	2.3%
<i>Health</i>	63.4%	26.6%	20,599	1.5%
<i>Human Services</i>	56.5%	24.1%	25,789	1.9%
Percent of Secondary Schools Able to Provide Counts of Students Selecting Career Majors		22.3%		

SOURCE: STW Local Partnership Survey, fall 1997 and NCES Common Core Database, 1995.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

**TABLE 8. CURRICULUM INTEGRATION STRATEGIES IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Strategy	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions
<i>Commercial Applied Academic Packages . .</i>	50.8%	23.6%	43.6%	20.1%	45.8%	23.6%	46.5%	22.0%
<i>School-Developed Applied Units/Projects . .</i>	59.6%	33.9%	57.4%	33.1%	54.8%	31.3%	57.8%	33.1%
<i>State-Developed Applied Curricula</i>	37.3%	16.8%	33.4%	13.0%	38.6%	13.6%	35.5%	14.5%
<i>"All Aspects of the Industry" in Vocational Courses</i>	45.2%	32.8%	44.4%	27.9%	50.1%	27.6%	45.5%	29.7%
<i>"All Aspects of the Industry" in Academic Courses</i>	39.5%	28.1%	37.4%	24.0%	45.2%	23.8%	39.3%	25.5%
<i>Academic-Vocational Team Teaching</i>	22.9%	10.9%	22.7%	10.3%	27.7%	15.7%	23.5%	11.4%
<i>Teacher Group Collaboration on Career- Related Curriculum Units</i>	24.5%	NA	26.8%	NA	37.9%	NA	27.6%	NA
<i>Common Teacher Planning Period for Teachers in Same Major/Pathway</i>	14.2%	NA	15.4%	NA	22.4%	NA	16.0%	NA
<i>Block Scheduling</i>	28.4%	NA	27.9%	NA	33.6%	NA	28.9%	NA
<i>Secondary/College Faculty Collaboration on New or Revised Curricula</i>	22.4%	27.9%	22.4%	23.0%	27.6%	26.6%	23.2%	25.5%
<i>Faculty/Employer Joint Development of Curricula for Classrooms or Worksites</i>	27.2%	29.3%	32.1%	28.3%	37.4%	28.0%	31.1%	28.6%

SOURCE: STW Local Partnership Survey, fall 1997.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 9. STUDENT ENTERPRISES: CHARACTERISTICS AND PARTICIPATION IN SY 1996-1997
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Features of Student Enterprises	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools	Percent of Partnerships ^a	Percent of Secondary Schools
Student Enterprises in Operation (All Types)	66.3%	32.3%	74.2%	31.5%	81.1%	34.8%	71.0%	32.3%
Majority Participation by Student Group From:								
<i>Specific Occupational Program(s)</i>	53.3%	19.9%	62.7%	20.7%	69.3%	24.3%	58.7%	20.9%
<i>Specific Academic Course(s)</i>	39.5%	12.7%	52.4%	14.0%	54.3%	15.5%	46.0%	13.8%
<i>Special Education or Students with Disabilities . . .</i>	21.8%	6.1%	32.5%	5.1%	43.3%	7.1%	28.4%	5.8%
<i>Career Interest Club(s)</i>	28.8%	8.4%	43.4%	8.8%	40.9%	9.4%	35.6%	8.8%
<i>General Student Body</i>	41.4%	15.1%	44.0%	10.5%	48.0%	12.1%	43.2%	12.3%
Features of Student Enterprises:								
<i>Participants Experience All Aspects of Operation</i>	59.3%	26.1%	66.7%	25.2%	74.8%	27.3%	63.9%	25.8%
<i>Participation Affects Class Grade</i>	57.2%	23.0%	63.9%	22.8%	73.2%	26.8%	61.6%	23.5%
<i>Local Businesses Provide Support</i>	45.9%	16.4%	59.1%	16.4%	66.1%	21.2%	53.2%	17.1%
<i>Participants Receive Wages/Share of Profits</i>	28.6%	9.6%	35.6%	7.0%	44.1%	11.5%	33.1%	8.6%
Percent of Secondary Schools That Can Provide Counts of Student Enterprise Participants SY 1996-1997		21.7%		20.0%		16.9%		20.1%
Total Number of Students Participating in Student Enterprises SY 1996-1997		29,280		56,541		18,192		104,013
Average Number of Students Per Partnership School Reporting Counts SY 1996-1997		41.7		61.5		80.1		56.3

SOURCE: STW Local Partnership Survey, fall 1997.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 10. SECONDARY-POSTSECONDARY LINKAGES IN SY 1997-1998,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Linkage	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools	Percent of Secondary Schools	Percent of Postsecondary Schools
<i>Share Labor Market Information</i>	40.2%	46.4%	47.3%	40.1%	41.8%	36.4%	44.0%	41.9%
<i>Share Employer Networks/Contacts</i>	38.6%	45.0%	43.4%	39.2%	38.1%	36.0%	40.9%	40.8%
<i>Joint Advisory Committees</i>	30.8%	40.0%	28.3%	30.2%	34.5%	32.7%	30.1%	34.3%
<i>Share Equipment</i>	23.7%	38.0%	17.2%	25.8%	22.0%	26.6%	20.2%	30.5%
<i>Joint Staff Development</i>	33.7%	36.2%	32.7%	27.8%	34.4%	33.4%	33.3%	31.9%
<i>Common Cooperative Education Standards</i>	27.0%	30.5%	27.6%	23.0%	36.1%	28.3%	28.7%	26.7%
<i>Agreements Allowing Dual Enrollment</i>	53.3%	56.7%	50.1%	44.0%	52.8%	41.4%	51.6%	48.3%
<i>Articulation Agreement Granting College Credit or Advanced Standing for Secondary School Coursework</i>	53.3%	59.1%	55.5%	49.0%	53.3%	48.8%	54.4%	52.7%
<i>Articulation Agreements Granting College Credit for High School Work-Based Learning</i>	NA	20.7%	NA	19.5%	NA	15.4%	NA	18.4%

SOURCE: STW Local Partnership Survey, fall 1997.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 11. CHANGES IN GRADUATION REQUIREMENTS SINCE JULY 1994

New Requirements	Percent of Partnerships	Percent of All Partnership Districts
Academic Requirements		
<i>Increased Number of Academic Credits Required</i>	60.0%	30.5%
<i>Increased Number of Semesters/Quarters of Math Required</i>	47.4%	22.6%
<i>Increased Level of Math Required</i>	43.9%	18.7%
<i>Increased Number of Semesters/Quarters of Science Required</i>	39.5%	17.1%
<i>Increased Number of Semesters/Quarters of English Required</i>	20.2%	7.8%
<i>Increased Number of Semesters/Quarters of Social Studies Required</i>	27.0%	10.6%
<i>Increased Number of Semesters/Quarters of Foreign Language Required</i>	14.3%	4.6%
<i>Requirement to Pass Basic Proficiency Exam</i>	26.6%	13.5%
<i>Requirement to Earn a Certificate of Initial Mastery</i>	7.6%	2.4%
<i>Elimination of Separate Diploma Requirements for College-Bound and Other Students</i>	12.5%	6.0%
<i>Introduction of Exam-Based Diploma</i>	7.0%	2.4%
Career/Work-Based Requirements		
<i>Requirement That Students Select a Career Major</i>	25.5%	7.3%
<i>Community Service Requirement</i>	24.5%	6.3%
<i>Technology Education or Vocational Requirement</i>	32.9%	10.8%
<i>Required Career Development Course</i>	28.0%	8.4%
<i>Required Work-Readiness Course</i>	19.5%	5.1%
Other		
<i>Requirement That Students Complete a Portfolio</i>	34.9%	13.5%
<i>Requirement to Complete Senior Project</i>	17.9%	5.4%
<i>Requirement to Pass Senior Exit Interview</i>	12.8%	3.0%

SOURCE: STW Local Partnership Survey, fall 1997.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 12. TECHNICAL SKILL AND WORKPLACE READINESS CERTIFICATES IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Industry-Specific Skill Certificates Awarded in SY 1996-1997				
<i>Percent of Partnerships Awarding Skill Certificates</i>	30.7%	49.0%	44.9%	39.1%
<i>Percent of Secondary Schools Awarding Skill Certificates</i>	11.4%	14.9%	11.1%	13.1%
<i>Percent of Secondary Schools Recording Certification on Student Transcripts</i>	3.8%	5.0%	5.0%	4.6%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Skill Certificates</i>	8.8%	8.4%	6.2%	8.2%
Seniors Who Received Skill Certificates in SY 1996-1997				
<i>Total Number</i>	8,585	37,189	3,973	49,747
<i>As a Percent of All Seniors in Partnership Schools</i>	2.9%	4.8%	1.2%	3.6%
Workplace Readiness Certificates Awarded in SY 1996-97				
<i>Percent of Partnerships Awarding Workplace Readiness Certificates</i>	12.1%	19.0%	13.4%	14.7%
<i>Percent of Secondary Schools Awarding Workplace Readiness Certificates</i>	4.0%	3.0%	4.7%	3.6%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Workplace Readiness Certificates</i>	3.2%	2.3%	2.2%	2.6%
Seniors Who Received Workplace Readiness Certificates in SY 1996-1997				
<i>Total Number</i>	2,128	5,222	1,315	8,665
<i>As a Percent of All Seniors in Partnership Schools</i>	0.7%	0.7%	0.4%	0.6%

SOURCE: STW Local Partnership Survey, fall 1997 and NCES Common Core Database, 1995.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 13. INDUSTRY EMPHASIS OF TECHNICAL SKILL CERTIFICATES IN SY 1996-1997

Career Area	Percent Awarded Skill Certificates		Number of 12th Graders Received Skill Certificates	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Students Receiving
<i>Agriculture/Natural Resources</i>	16.7%	4.0%	2,229	2.9
<i>Arts/Communication/Humanities</i>	13.0%	2.5%	2,154	2.8
<i>Business/Marketing/Finance</i>	26.6%	7.4%	11,196	14.8
<i>Engineering/Industrial Technology</i>	26.9%	6.6%	11,343	15.0
<i>Health</i>	25.8%	6.1%	6,213	8.2
<i>Human Services</i>	17.4%	4.4%	4,870	6.4

SOURCE: STW Local Partnership Survey, fall 1997.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 14. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1996-1997

Type of Support Provided by Business/Labor	Percent Received Support		Number of Employers Provided Support		Number of Labor Unions Provided Support	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Supporting Employers	Total	Average Per School Reporting Counts of Supporting Unions
Working With School Staff						
<i>Curriculum Development</i>	71.1%	34.1%	20,391	4.5	862	0.2
<i>Promotion/Marketing STW</i>	85.0%	45.6%	30,791	6.7	1123	0.2
<i>Training/Internships for School Staff</i>	83.8%	48.3%	23,540	5.1	785	0.2
<i>Guest Speaking at Schools</i>	91.4%	56.7%	59,412	13.0	1384	0.3
Providing Material Resources						
<i>Provide Equipment</i>	74.6%	32.2%	9,744	2.1	355	0.1
<i>Loan Office Space</i>	57.3%	22.8%	11,433	2.5	208	0.0
<i>Provide Student Awards</i>	72.2%	33.6%	12,495	2.7	687	0.2
<i>Provide Teacher Stipends</i>	38.3%	13.3%	2,395	0.5	103	0.0
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions		49.8%				

SOURCE: STW Local Partnership Survey, fall 1997.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 15. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Support Provided by Business/Labor	Percent of Secondary Schools Received Support In:			
	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Working With School Staff				
<i>Curriculum Development</i>	29.2%	36.3%	35.2%	33.6%
<i>Promotion/Marketing STW</i>	47.1%	45.0%	42.9%	45.5%
<i>Training/Internships for School Staff</i>	43.3%	52.0%	45.8%	48.0%
<i>Guest Speaking at Schools</i>	55.4%	57.6%	55.7%	56.5%
Providing Material Resources				
<i>Provide Equipment</i>	30.5%	32.2%	32.8%	31.7%
<i>Loan Office Space</i>	20.0%	24.0%	22.6%	22.4%
<i>Provide Student Awards</i>	31.9%	33.9%	37.2%	33.6%
<i>Provide Teacher Stipends</i>	10.2%	14.6%	17.5%	13.5%
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions	52.9%	47.3%	46.4%	49.2%

SOURCE: STW Local Partnership Survey, fall 1997.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

TABLE 16. WORKPLACE ACTIVITY: AVAILABILITY AND STUDENT PARTICIPATION IN SY 1996-1997

Type of Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Secondary Schools	Total Number	Average Per School Reporting Counts of Students Participating	Total Number	Average Per School Reporting Counts of Students Participating
Related to Chosen Career Major/Pathway						
<i>Paid Jobs During School Year</i>	58.5%	27.3%	70,485	19.5	26,548	7.3
<i>Unpaid Internships/Jobs During School Year</i>	57.5%	23.9%	76,775	21.2	13,384	3.7
<i>Paid Summer Jobs</i>	47.1%	17.4%	30,064	8.3	8,021	2.2
<i>Unpaid Summer Internships/Jobs</i>	25.7%	9.2%	14,278	4.0	1,426	0.4
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	86.0%	51.1%	243,148	67.3	54,554	15.1
<i>Community Service/Volunteer Work</i>	71.2%	30.6%	145,370	40.2	15,014	4.2
<i>Workplace Experience Not Related to Career Major</i>	61.6%	27.0%	99,233	27.5	18,131	5.0
<i>Assignment to a Workplace Mentor</i>	53.9%	20.0%	38,052	10.5	11,217	3.1
Percent of Secondary Schools Able to Provide Counts of Students Participating in Workplace Activities . . .		39.4%				

SOURCE: STW Local Partnership Survey, fall 1997.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.\

**TABLE 17. AVAILABILITY OF WORKPLACE ACTIVITY IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Workplace Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts
Related to Career Major								
<i>Paid Jobs During School Year</i>	22.9%	11.8	28.2%	21.0	35.1%	35.4	27.3%	19.5
<i>Unpaid Internships/Jobs During School Year</i>	21.5%	11.3	23.4%	29.6	31.4%	18.5	23.9%	21.2
<i>Paid Summer Jobs</i>	12.7%	4.8	17.3%	9.2	28.8%	14.9	17.4%	8.3
<i>Unpaid Summer Internships/Jobs</i>	5.0%	0.6	10.4%	7.0	14.9%	2.2	9.2%	4.0
Not Necessarily Related to Career Major								
<i>Worksite Visits/Job Shadowing</i>	48.8%	63.0	52.8%	69.8	50.6%	69.9	51.1%	67.3
<i>Community Service/Volunteer Work</i>	26.8%	30.1	30.6%	42.1	40.2%	61.3	30.6%	40.2
<i>Workplace Experience Not Related to Career Major</i>	24.3%	20.0	26.8%	32.3	34.5%	30.6	27.0%	27.5
<i>Workplace Mentor</i>	16.3%	6.8	20.3%	11.8	27.4%	16.1	20.0%	10.5

SOURCE: STW Local Partnership Survey, fall 1997.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 18. WORKPLACE ACTIVITY ARRANGED BY ALTERNATIVE EDUCATION PROVIDERS:
AVAILABILITY AND PARTICIPATION IN SY 1996-1997**

Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Alternative Education Providers	Total Number	Average Number Per Provider Reporting Counts of Students Participating	Total Number	Average Number Per Provider Reporting Counts of Students Participating
Related to Chosen Career Major						
<i>Paid Jobs During School Year</i>	18.7%	11.5%	3,353	7.7	1,918	4.4
<i>Unpaid Internships/Jobs During School Year</i>	16.0%	10.5%	4,847	11.2	1,197	2.8
<i>Paid Summer Jobs</i>	14.1%	11.6%	3,612	8.3	1,771	4.1
<i>Unpaid Summer Internships/Jobs</i>	6.6%	5.2%	1,306	3.0	407	0.9
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	29.5%	20.4%	9,178	21.1	4,355	10.0
<i>Community Service/Volunteer Work</i>	22.7%	15.1%	7,644	17.6	1,615	3.7
<i>Workplace Experience Not Related to Career Major</i>	20.2%	14.7%	5,110	11.8	2,453	5.7
<i>Assignment to a Workplace Mentor</i>	15.3%	9.0%	3,529	8.1	2,009	4.6
Percent of Alternative Education Providers Able to Provide Counts of Students Participating in Workplace Activities						
		17.2%				

SOURCE: STW Local Partnership Survey, fall 1997.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 19. CHARACTERISTICS OF SY 1996-1997 SENIORS IN INTENSIVE STW ACTIVITIES^a

Student Characteristics	12th Graders in Intensive STW Activities	All Secondary Students in Partnerships Reporting on Intensive STW Participation
Total Number of 12th Graders	71,479	758,165
Race/Ethnicity (Percent of Total)		
<i>White</i>	73.3%	69.2%
<i>Black</i>	16.2%	18.3%
<i>Hispanic</i>	6.1%	8.6%
<i>Native American/Alaskan Native</i>	1.0%	1.0%
<i>Asian/Pacific Islander</i>	1.5%	3.0%
<i>Unknown</i>	2.0%	
Other Characteristics (Percent of Total)		
<i>Female</i>	49.1%	na
<i>Limited English Proficiency</i>	2.9%	na
<i>Students with Disabilities</i>	10.1%	na
<i>Economically/Educationally Disadvantaged</i>	29.9%	na
<i>Academically Gifted and Talented</i>	5.8%	na
Percent of Partnerships Able to Report Student Characteristics	35.6%	

SOURCE: STW Local Partnership Survey, fall 1997.

na = Not available

^aIntensive STW activities include paid or unpaid jobs/internships held during the school year that are related to a student's chosen career major.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 20. OUTCOMES FOR SY 1996-1997 PARTICIPANTS IN INTENSIVE STW ACTIVITIES

	Percent Reporting Outcomes		Number of Students Reported	
	Partnerships	Secondary Schools	Total	Average Per Reporting School
Number of 12th Grade Students in Intensive STW Activities	47.2%	30.5%	71,479	15.2
Student Outcomes^a				
<i>Graduated from High School in 1997</i>	32.0%	11.9%	36,088	7.7
<i>Entered Employment After High School Related to Career Major</i>	13.8%	3.1%	5,047	1.1
<i>Entered Postsecondary Education/Training:</i>	18.3%	4.7%	11,755	2.5
<i>Four-Year College</i>	16.1%		5,069	
<i>Two-Year College</i>	16.8%		4,406	
<i>Vocational Training</i>	8.9%		1,055	
<i>Proprietary School</i>	3.2%		228	
<i>Registered Apprenticeship</i>	4.7%		298	
<i>Armed Forces</i>	12.2%		699	

SOURCE: STW Local Partnership Survey, fall 1997.

^aRates of transition (e.g., graduation rates, postsecondary enrollment rate) cannot be computed from the figures in this table because particular outcomes may be reported for varying numbers of partnership schools.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

APPENDIX C

FALL 1996 LPS DATA TABLES

TABLE 1. PARTNERSHIP SIZE AND COMPOSITION IN FALL/WINTER 1996

Type of Institution/Entity ^a	Number of Partnerships with Each Entity	Number of Each Entity		Percent of Partnerships With Entity As	
		Total	Average Per Partnership	Lead Organization	Fiscal Agent
Education Institutions					
Local Education Agencies/Districts	826	5,122	6.2	35.1%	53.1%
High Schools	822	6,375	7.7	7.6%	6.2%
Middle Schools	747	6,001	7.2	0.0%	0.0%
Elementary Schools	719	16,849	20.3	0.0%	0.0%
Vocational High Schools	207	407	0.5	1.6%	1.7%
Area/Regional Vocational Districts/Centers	261	392	0.5	5.2%	6.8%
Intermediate or Regional Educational Service Districts	282	375	0.5	3.3%	6.9%
2-Year Postsecondary Institutions	745	1,161	1.4	5.4%	9.2%
4-Year Postsecondary Institutions	475	922	1.1	0.6%	0.8%
Alternative Education Providers	575	1,548	1.9	0.1%	0.2%
Other Educational Institutions	166	310	0.4	0.7%	0.5%
Training Institutions					
Proprietary Training Institutions	134	284	0.3	0.0%	0.0%
Registered Apprenticeship Agencies	242	484	0.6	0.0%	0.0%
JTPA/PIC Agencies	585	665	0.8	1.8%	3.9%
Other Training Institutions	140	268	0.3	0.0%	0.0%
Business and Labor					
Private Sector Firms	682	13,480	16.3	0.7%	0.4%
Business/Industry or Trade Associations	431	1,717	2.1	0.5%	0.1%
Chambers of Commerce	625	1,325	1.6	2.4%	1.6%
Labor Unions	502	1,015	1.2	0.0%	0.0%
Other Organizations					
Workforce Development Boards	410	489	0.6	2.7%	1.7%
Local/Regional/State Government Agencies	653	2,863	3.5	0.5%	2.2%
Community-based Organizations/Other Nonprofit	511	1,835	2.2	2.4%	2.3%
Parent/Student Representation	475	NA	NA	NA	NA
Other	476	476	0.6	0.6%	0.7%
No Single Lead Organization/Fiscal Agent Not Reported				28.4%	1.8%

SOURCE: STW Local Partnership Survey, fall 1996.

^aMay include some double-counting across partnerships.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 2. REPRESENTATION ON GOVERNING BOARDS IN SY 1996-1997

Types of Members on Governing Board	Number of Partnerships with Each Type	Percent of Partnerships with Chairperson From Each Member Type ^a	Number of Each Member Type	
			Total	Average Per Partnership
Secondary School Districts				
LEA/Vocational District Administrators	628	21.4%	2,529	3.1
Individual School Administrators	446	6.6%	1,438	1.7
Academic Faculty	387	3.6%	1,456	1.8
Vocational Faculty	348	3.7%	903	1.1
Counselors	400	1.9%	854	1.0
Postsecondary Institutions				
Administrators	506	6.5%	963	1.2
Faculty	256	1.1%	432	0.5
Counselors	101	0.2%	134	0.2
Training institutions				
Proprietary Training Institutions	62	0.1%	74	0.1
Registered Apprenticeship Agencies	123	0.2%	165	0.2
JTPA/PIC Agencies	380	1.9%	494	0.6
Business and Labor				
Private Sector Firms	583	21.7%	4,452	5.4
Business Associations/Chambers of Commerce . . .	497	7.7%	1,325	1.6
Labor Unions	365	1.2%	557	0.7
Other Organizations				
Alternative Education Providers	244	0.6%	343	0.4
Workforce Development Boards	248	2.2%	494	0.6
Local//Regional/State Government Agencies	474	3.4%	1,380	1.7
Community-Based Organizations/Other Nonprofit . .	328	2.1%	918	1.1
Parents	315	1.1%	NA	NA
Students	282	0.6%	NA	NA
Other	521	3.7%	3,937	4.8
No Governing Board/Chairperson Not Reported	145	24.2%		
Average Number of Board Members Overall	27.6			
Percentage of Partnerships with Employer Representatives as Majority of Board Members	6.3%			

SOURCE: STW Local Partnership Survey, fall 1996.

^aMay sum to more than 100% because partnerships often have more multiple chairpersons.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 3. CAREER AWARENESS AND DEVELOPMENT ACTIVITIES IN SY 1996-1997

	Activity Reported as Routinely Available In:					
	Secondary Schools		Postsecondary Institutions		Alternative Education Providers	
	Total Number	Percent of Secondary Schools	Total Number	Percent of Postsecondary Institutions	Total Number	Percent of Alternative Education Providers
Total Number of Institutions in Partnerships	7,174	100.0%	2,083	100.0%	1,548	100.0%
Total Number of Institutions Reporting on Career Awareness and Development Activities	5,199	72.5%	955	45.8%	790	51.0%
By Type of Approach/Activity:						
<i>Separate Career Awareness/Development Classes</i>	2,648	36.9%	572	27.5%	494	31.9%
<i>Separate Work Readiness Classes</i>	2,040	28.4%	439	21.1%	434	28.0%
<i>Activities Integrated Into Academic/Vocational Classes</i>	4,235	59.0%	730	35.0%	574	37.1%
<i>Development of Individual Student Plans</i>	3,166	44.1%	NA	NA	474	30.6%
<i>Career Interest Inventories</i>	4,254	59.3%	564	27.1%	538	34.8%
<i>Scheduled Use of Career Centers</i>	2,542	35.4%	549	26.4%	291	18.8%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 4. CAREER AWARENESS AND DEVELOPMENT ACTIVITY IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools
<i>Separate Career Awareness/Development Classes</i>	73.7%	41.6%	74.8%	31.7%	79.3%	44.4%	74.9%	36.9%
<i>Separate Work Readiness Classes</i>	62.0%	29.4%	70.8%	25.9%	73.3%	35.2%	66.8%	28.4%
<i>Activities Integrated Into Academic/Vocational Classes</i>	87.6%	61.8%	89.7%	57.4%	84.5%	58.4%	87.9%	59.0%
<i>Development of Individual Student Course Plans</i>	73.2%	46.1%	77.4%	41.8%	70.7%	47.9%	74.4%	44.1%
<i>Career Interest Inventories</i>	88.6%	63.4%	89.4%	56.1%	82.8%	60.9%	88.0%	59.3%
<i>Scheduled Use of Career Centers</i>	59.9%	33.0%	73.8%	35.8%	67.2%	39.6%	65.9%	35.4%

SOURCE: STW Local Partnership Survey, fall 1996

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 5. PROMOTING ACCESS TO SCHOOL-TO-WORK IN SY 1996-1997

Strategy	Percent of Partnerships Using Each Strategy for Specified Special Population Groups							
	Minority Students	Limited English Proficiency (LEP) Students	Students With Disabilities	Economically or Educationally Disadvantaged Students	Pregnant or Parenting Students	Out of School Youth	Males or Females With Regard to Non-Traditional Occupations	Academically Gifted/Talented Students
Partnership-Level Strategies								
<i>Representatives required on partnership governing board</i>	26.9%	16.8%	37.6%	35.3%	20.2%	28.4%	29.5%	21.3%
<i>Partnership grant funds used for special services, accommodations, or activities</i>	34.1%	27.8%	44.9%	46.3%	30.7%	36.2%	38.3%	29.0%
<i>Training for business community on working with special populations</i>	21.1%	15.9%	34.7%	29.5%	18.2%	21.4%	24.9%	17.8%
School-Level Strategies								
<i>Materials/instruction in students' native (non-English) language</i>	NA	42.4%	NA	NA	NA	NA	NA	NA
<i>Culturally-specific curriculum materials</i>	38.5%	35.1%	NA	NA	NA	NA	52.3%	NA
<i>Interpreters</i>	NA	43.4%	56.3%	NA	NA	NA	NA	NA
<i>Targeted promotional materials</i>	48.1%	36.0%	56.5%	57.5%	49.5%	42.1%	61.8%	47.7%
<i>Special career guidance</i>	56.9%	49.8%	77.3%	71.7%	67.4%	56.9%	68.0%	61.0%
<i>Special tutoring</i>	50.1%	56.4%	74.2%	67.8%	59.9%	45.2%	46.0%	46.4%
<i>Regularly scheduled progress evaluations</i>	50.6%	49.6%	74.0%	66.4%	56.3%	41.7%	51.3%	54.3%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.

Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 6. DEFINITION AND PREVALENCE OF CAREER MAJORS IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools
Career Majors in Use (All Definitions)	64.5%	43.4%	77.7%	48.4%	77.6%	50.3%	71.1%	46.9%
Characteristics of Career Majors								
<i>Written Course Sequence</i>	62.5%	36.1%	75.7%	42.0%	74.1%	45.5%	69.0%	40.5%
<i>Some Students Grouped by Career Area</i>	40.6%	18.3%	53.5%	20.6%	47.4%	26.6%	46.3%	20.7%
<i>All Students Grouped by Career Area</i>	18.7%	11.8%	29.6%	13.6%	35.3%	11.5%	25.0%	12.7%
<i>Instruction Provided on Issues and Pathways Related to Career Area</i>	44.0%	20.1%	59.1%	23.8%	58.6%	28.1%	51.6%	23.2%
<i>Extended Workplace Activity Required</i>	46.2%	20.1%	64.8%	26.8%	64.7%	28.3%	55.6%	24.7%

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 7. INDUSTRY EMPHASIS OF CAREER MAJORS IN SY 1996-1997

Career Major Categories	Percent of Partnerships With Career Major in Specified Category ^a	Percent of Secondary Schools With Career Major in Specified Category	12th Graders Selecting Career Major in Specified Category	
			Total Number	As Percentage of All 12th Graders in Partnership Schools
<i>Agriculture/Natural Resources</i>	48.2%	20.2%	9,516	0.7%
<i>Arts/Communications/Humanities</i>	51.2%	23.1%	18,820	1.4%
<i>Business/Marketing/Finance</i>	62.6%	34.6%	42,731	3.1%
<i>Engineering/Industrial Technology</i>	62.0%	30.4%	31,886	2.3%
<i>Health</i>	55.9%	26.3%	17,638	1.3%
<i>Human Services</i>	49.9%	23.6%	22,085	1.6%
Percent of Secondary Schools Able to Provide Counts of Students Selecting Career Majors		37.6%		

SOURCE: STW Local Partnership Survey, fall 1996 and NCES Common Core Database, 1994.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

**TABLE 8. CURRICULUM INTEGRATION STRATEGIES IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Strategy	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions	Percent of Secondary Schools	Percent of Postsecondary Institutions
<i>Commercial Applied Academic Packages .</i>	48.8%	26.9%	43.0%	18.8%	47.5%	23.2%	45.6%	22.5%
<i>School-Developed Applied Units/Projects .</i>	54.6%	33.9%	52.2%	30.1%	56.3%	29.6%	53.6%	31.4%
<i>State-Developed Applied Curricula</i>	32.5%	15.3%	28.3%	11.4%	29.1%	13.3%	29.8%	13.2%
<i>"All Aspects of the Industry" in Vocational Courses</i>	41.9%	35.0%	41.5%	28.5%	45.6%	26.4%	42.2%	30.4%
<i>"All Aspects of the Industry" in Academic Courses</i>	36.8%	30.0%	33.5%	23.1%	43.6%	24.0%	36.1%	25.7%
<i>Academic-Vocational Team Teaching</i>	21.8%	14.1%	22.0%	10.0%	22.5%	11.2%	22.0%	11.7%
<i>Teacher Group Collaboration on Career- Related Curriculum Units</i>	23.3%	NA	27.1%	NA	34.9%	NA	26.9%	NA
<i>Common Teacher Planning Period for Teachers in Same Major/Pathway</i>	12.1%	NA	14.2%	NA	20.1%	NA	14.4%	NA
<i>Block Scheduling</i>	26.1%	NA	24.0%	NA	30.5%	NA	25.6%	NA
<i>Secondary/College Faculty Collaboration on New or Revised Curricula</i>	22.6%	29.5%	25.2%	25.3%	31.3%	24.8%	25.2%	26.7%
<i>Faculty/Employer Joint Development of Curricula for Classrooms or Worksites . . .</i>	25.9%	33.5%	30.7%	29.6%	37.2%	27.2%	30.0%	30.6%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 9. STUDENT ENTERPRISES: CHARACTERISTICS AND PARTICIPATION IN SY 1995-1996
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Features of Student Enterprises	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools	Percent of Partnerships	Percent of Secondary Schools
Student Enterprises in Operation (All Types)	60.3%	30.3%	72.4%	31.5%	72.4%	35.3%	66.4%	31.6%
Majority Participation by Student Group From:								
<i>Specific Occupational Program(s)</i>	47.9%	19.0%	62.8%	19.7%	62.1%	24.2%	55.3%	20.1%
<i>Specific Academic Course(s)</i>	34.1%	11.6%	40.5%	10.4%	39.7%	14.7%	37.2%	11.4%
<i>Special Education or Students with Disabilities</i>	18.2%	4.5%	30.9%	5.8%	27.6%	6.5%	24.2%	5.5%
<i>Career Interest Club(s)</i>	24.8%	7.9%	37.9%	7.6%	34.5%	9.9%	30.9%	8.1%
<i>General Student Body</i>	34.3%	11.7%	39.2%	10.8%	36.2%	12.0%	36.4%	11.3%
Features of Student Enterprises:								
<i>Participants Experience All Aspects of Operation</i>	53.8%	22.3%	63.1%	21.6%	62.9%	24.4%	58.5%	22.2%
<i>Participation Affects Class Grade</i>	54.3%	22.4%	60.1%	20.3%	62.9%	23.3%	57.6%	21.4%
<i>Local Businesses Provide Support</i>	37.7%	12.9%	54.2%	16.0%	55.2%	18.5%	46.1%	15.3%
<i>Participants Receive Wages/Share of Profits</i>	30.2%	8.4%	30.6%	6.2%	31.9%	8.4%	30.6%	7.2%
Percent of Secondary Schools That Can Provide Counts of Student Enterprise Participants SY 1995-1996		20.4%		18.9%		19.5%		19.5%
Total Number of Students Participating in Student Enterprises SY 1995-1996		21,803		53,570		14,186		89,559
Average Number of Students Per Partnership School Reporting Counts SY 1995-1996		43.9		76.5		70.9		64.1

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 10. SECONDARY-POSTSECONDARY LINKAGES IN SY 1996-1997,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Linkage	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Percent of Postsecondar y Schools	Percent of Secondary Schools	Percent of Postsecondar y Schools	Percent of Secondary Schools	Percent of Postsecondar y Schools	Percent of Secondary Schools	Percent of Postsecondar y Schools
<i>Share Labor Market Information</i>	41.0%	43.3%	41.4%	34.6%	50.7%	38.1%	42.6%	38.4%
<i>Share Employer Networks/Contacts</i>	38.8%	38.3%	42.7%	33.3%	44.6%	34.4%	41.7%	35.3%
<i>Joint Advisory Committees</i>	33.3%	37.8%	31.1%	29.1%	36.4%	29.9%	32.6%	32.4%
<i>Share Equipment</i>	22.1%	32.3%	16.9%	20.2%	18.5%	24.3%	18.9%	25.3%
<i>Joint Staff Development</i>	30.8%	33.5%	34.2%	24.9%	37.2%	29.1%	33.5%	28.8%
<i>Common Cooperative Education Standards</i>	26.5%	21.7%	28.8%	17.3%	37.7%	20.5%	29.3%	19.4%
<i>Agreements Allowing Dual Enrollment</i>	50.9%	48.8%	49.1%	37.6%	53.9%	38.7%	50.4%	41.8%
<i>Articulation Agreement Granting College Credit or Advanced Standing for Secondary School Coursework</i>	52.5%	53.6%	53.3%	42.4%	57.5%	43.5%	53.6%	46.6%
<i>Articulation Agreements Granting College Credit for High School Work-Based Learning</i>	NA	23.9%	NA	25.2%	NA	13.9%	NA	20.7%

SOURCE: STW Local Partnership Survey, fall 1996.

NA = Not Applicable

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 11. CHANGES IN GRADUATION REQUIREMENTS SINCE JULY 1994

New Requirements	Percent of Partnerships	Percent of All Partnership Districts
Academic Requirements		
<i>Increased Number of Academic Credits Required</i>	48.7%	20.3%
<i>Increased Number of Semesters/Quarters of Math Required</i>	36.5%	13.7%
<i>Increased Level of Math Required</i>	34.4%	12.9%
<i>Increased Number of Semesters/Quarters of Science Required</i>	30.8%	11.0%
<i>Increased Number of Semesters/Quarters of English Required</i>	14.1%	4.4%
<i>Increased Number of Semesters/Quarters of Social Studies Required</i>	21.5%	7.3%
<i>Increased Number of Semesters/Quarters of Foreign Language Required</i>	10.9%	3.1%
<i>Requirement to Pass Basic Proficiency Exam</i>	19.8%	9.1%
<i>Requirement to Earn a Certificate of Initial Mastery</i>	5.9%	1.2%
<i>Elimination of Separate Diploma Requirements for College-Bound and Other Students</i>	9.1%	3.9%
<i>Introduction of Exam-Based Diploma</i>	5.0%	2.4%
Career/Work-Based Requirements		
<i>Requirement That Students Select a Career Major</i>	20.9%	7.0%
<i>Community Service Requirement</i>	19.4%	5.0%
<i>Technology Education or Vocational Requirement</i>	30.0%	9.2%
<i>Required Career Development Course</i>	23.1%	6.5%
<i>Required Work-Readiness Course</i>	16.2%	4.3%
<i>Requirement That Students Complete a Portfolio</i>	30.2%	12.0%

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 12. TECHNICAL SKILL AND WORKPLACE READINESS CERTIFICATES IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Industry-Specific Skill Certificates Awarded in SY 1995-1996				
<i>Percent of Partnerships Awarding Skill Certificates</i>	25.8%	49.2%	32.8%	35.3%
<i>Percent of Secondary Schools Awarding Skill Certificates</i>	9.4%	16.5%	8.3%	12.9%
<i>Percent of Secondary Schools Recording Certification on Student Transcripts</i>	3.8%	4.4%	1.7%	3.8%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Skill Certificates</i>	7.2%	10.1%	5.8%	8.5%
Seniors Who Received Skill Certificates in SY 1995-1996				
<i>Total Number</i>	5,098	23,970	4,296	33,364
<i>As a Percent of All Seniors in Partnership Schools</i>	2.5%	3.4%	0.9%	2.4%
Workplace Readiness Certificates Awarded in SY 1995-96				
<i>Percent of Partnerships Awarding Workplace Readiness Certificates</i>	10.5%	15.3%	11.2%	12.3%
<i>Percent of Secondary Schools Awarding Workplace Readiness Certificates</i>	2.3%	2.9%	3.0%	2.7%
<i>Percent of Secondary Schools Reporting Counts of Students Receiving Workplace Readiness Certificates</i>	2.0%	2.5%	2.5%	2.4%
Seniors Who Received Workplace Readiness Certificates in SY 1995-1996				
<i>Total Number</i>	1,865	5,497	2,024	9,386
<i>As a Percent of All Seniors in Partnership Schools</i>	0.9%	0.8%	0.4%	0.7%

SOURCE: STW Local Partnership Survey, fall 1996 and NCES Common Core Database, 1994.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 13. INDUSTRY EMPHASIS OF TECHNICAL SKILL CERTIFICATES IN SY 1995-1996

Career Area	Percent Awarded Skill Certificates		Number of 12th Graders Received Skill Certificates	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Students Receiving
<i>Agriculture/Natural Resources</i>	13.2%	2.7%	1,385	2.3
<i>Arts/Communication/Humanities</i>	12.7%	3.0%	2,680	4.4
<i>Business/Marketing/Finance</i>	24.3%	8.0%	10,083	16.6
<i>Engineering/Industrial Technology</i>	24.5%	7.5%	10,068	16.6
<i>Health</i>	22.1%	6.3%	4,413	7.3
<i>Human Services</i>	17.6%	4.9%	4,371	7.2

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 14. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1995-1996

Type of Support Provided by Business/Labor	Percent Received Support		Number of Employers Provided Support		Number of Labor Unions Provided Support	
	Partnerships ^a	Secondary Schools	Total	Average Per School Reporting Counts of Supporting Employers	Total	Average Per School Reporting Counts of Supporting Unions
Working With School Staff						
<i>Curriculum Development</i>	65.8%	30.7%	19,038	4.7	691	0.2
<i>Promotion/Marketing STW</i>	78.6%	38.6%	24,841	6.2	859	0.2
<i>Training/Internships for School Staff</i>	76.9%	40.9%	16,175	4.0	512	0.1
<i>Guest Speaking at Schools</i>	88.0%	53.2%	49,025	12.2	1,246	0.3
Providing Material Resources						
<i>Provide Equipment</i>	70.0%	29.0%	7,551	1.9	282	0.1
<i>Loan Office Space</i>	53.1%	20.8%	7,260	1.8	400	0.1
<i>Provide Student Awards</i>	67.5%	30.0%	9,159	2.3	887	0.2
<i>Provide Teacher Stipends</i>	33.1%	11.3%	1,702	0.4	53	0.0
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions		56.1%				

SOURCE: STW Local Partnership Survey, fall 1996.

^aThe number of partnerships having at least one secondary school offering the category of activity, divided by the total number of partnerships.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students. *Postsecondary institutions* include two-year and four-year institutions of higher education.

**TABLE 15. BUSINESS AND LABOR SUPPORT PROVIDED TO SCHOOLS IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Support Provided by Business/Labor	Percent of Secondary Schools Received Support In:			
	Rural Partnerships	Suburban Partnerships	Urban Partnerships	All Partnerships
Working With School Staff				
<i>Curriculum Development</i>	24.8%	32.6%	38.2%	30.7%
<i>Promotion/Marketing STW</i>	39.3%	37.5%	41.2%	38.6%
<i>Training/Internships for School Staff</i>	39.2%	41.7%	41.7%	40.9%
<i>Guest Speaking at Schools</i>	52.8%	53.5%	53.6%	53.2%
Providing Material Resources				
<i>Provide Equipment</i>	28.5%	28.3%	32.5%	29.0%
<i>Loan Office Space</i>	18.6%	21.5%	23.1%	20.8%
<i>Provide Student Awards</i>	29.6%	28.7%	35.6%	30.0%
<i>Provide Teacher Stipends</i>	7.2%	12.9%	14.7%	11.3%
Percent of Secondary Schools Able to Provide Counts of Supporting Employers/Unions	57.9%	55.5%	53.8%	56.1%

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 16. WORKPLACE ACTIVITY: AVAILABILITY AND STUDENT PARTICIPATION IN SY 1995-1996

Type of Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Secondary Schools	Total Number	Average Per School Reporting Counts of Students Participating	Total Number	Average Per School Reporting Counts of Students Participating
Related to Chosen Career Major/Pathway						
<i>Paid Jobs During School Year</i>	56.6%	28.4%	71,320	25.2	28,354	10.0
<i>Unpaid Internships/Jobs During School Year</i>	55.0%	24.5%	51,599	18.2	14,102	5.0
<i>Paid Summer Jobs</i>	45.4%	18.5%	23,264	8.2	8,456	3.0
<i>Unpaid Summer Internships/Jobs</i>	23.2%	6.9%	2,200	0.8	1,733	0.6
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	83.1%	48.8%	209,619	74.0	42,331	15.0
<i>Community Service/Volunteer Work</i>	65.9%	29.2%	110,347	39.0	11,956	4.2
<i>Workplace Experience Not Related to Career Major</i> . . .	56.2%	23.7%	69,662	24.6	13,257	4.7
<i>Assignment to a Workplace Mentor</i>	50.4%	18.1%	53,030	18.7	11,364	4.0
Percent of Secondary Schools Able to Provide Counts of Students Participating in Workplace Activities . . .		39.5%				

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 17. AVAILABILITY OF WORKPLACE ACTIVITY IN SY 1995-1996,
FOR PARTNERSHIPS IN RURAL, SUBURBAN, AND URBAN AREAS**

Type of Workplace Activity	Rural Partnerships		Suburban Partnerships		Urban Partnerships		All Partnerships	
	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts	Percent of Secondary Schools	Average Number of Students per School Reporting Counts
Related to Career Major								
<i>Paid Jobs During School Year</i>	25.4%	20.1	28.8%	25.2	34.4%	40.3	28.4%	25.2
<i>Unpaid Internships/Jobs During School Year</i>	22.5%	8.8	24.5%	24.7	29.4%	22.1	24.5%	18.2
<i>Paid Summer Jobs</i>	17.3%	6.9	16.6%	6.1	28.4%	20.2	18.5%	8.2
<i>Unpaid Summer Internships/Jobs</i>	5.9%	0.4	5.4%	0.8	14.9%	1.8	6.9%	0.8
Not Necessarily Related to Career Major								
<i>Worksite Visits/Job Shadowing</i>	47.8%	58.6	49.7%	87.5	48.2%	69.7	48.8%	74.0
<i>Community Service/Volunteer Work</i>	23.5%	28.3	30.9%	42.2	36.8%	58.8	29.2%	39.0
<i>Workplace Experience Not Related to Career Major</i>	23.4%	20.0	22.1%	24.2	30.5%	39.6	23.7%	24.6
<i>Workplace Mentor</i>	14.4%	4.6	17.5%	31.9	28.9%	11.6	18.1%	18.7

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

**TABLE 18. WORKPLACE ACTIVITY ARRANGED BY ALTERNATIVE EDUCATION PROVIDERS:
AVAILABILITY AND PARTICIPATION IN SY 1995-1996**

Workplace Activity	Percent Where Available		Number of Students Participated		Number of Employers	
	Partnerships	Alternative Education Providers	Total Number	Average Number Per Provider Reporting Counts of Students Participating	Total Number	Average Number Per Provider Reporting Counts of Students Participating
Related to Chosen Career Major						
<i>Paid Jobs During School Year</i>	16.4%	2.9%	3,536	9.8	1,827	5.1
<i>Unpaid Internships/Jobs During School Year</i>	15.5%	2.6%	3,762	10.5	1,614	4.5
<i>Paid Summer Jobs</i>	12.3%	2.1%	2,822	7.9	1,335	3.7
<i>Unpaid Summer Internships/Jobs</i>	5.6%	1.0%	370	1.0	418	1.2
Not Necessarily Related to Chosen Career Major						
<i>Worksite Visits/Job Shadowing</i>	25.7%	4.8%	8,164	22.7	3,496	9.7
<i>Community Service/Volunteer Work</i>	20.0%	3.6%	5,576	15.5	1,579	4.4
<i>Workplace Experience Not Related to Career Major . . .</i>	17.5%	3.4%	6,975	19.4	3,204	8.9
<i>Assignment to a Workplace Mentor</i>	12.2%	2.1%	2,666	7.4	1,152	3.2
Percent of Alternative Education Providers Able to Provide Counts of Students Participating in Workplace Activities						
		5.0%				

SOURCE: STW Local Partnership Survey, fall 1996.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 19. CHARACTERISTICS OF SY 1995-1996 SENIORS IN INTENSIVE STW ACTIVITIES^a

Student Characteristics	12th Graders in Intensive STW Activities	All Secondary Students in Partnerships Reporting on Intensive STW Participation
Total Number of 12th Graders	65,291	707,472
Race/Ethnicity (Percent of Total)		
<i>White</i>	70.2%	69.1%
<i>Black</i>	17.2%	14.9%
<i>Hispanic</i>	5.9%	11.2%
<i>Native American/Alaskan Native</i>	1.1%	1.0%
<i>Asian/Pacific Islander</i>	3.8%	3.9%
<i>Unknown</i>	1.8%	
Other Characteristics (Percent of Total)		
<i>Female</i>	45.7%	na
<i>Limited English Proficiency</i>	1.8%	na
<i>Students with Disabilities</i>	9.5%	na
<i>Economically/Educationally Disadvantaged</i>	22.0%	na
<i>Academically Gifted and Talented</i>	4.7%	na
Percent of Partnerships Able to Report Student Characteristics	43.0%	

SOURCE: STW Local Partnership Survey, fall 1996.

na = Not available

^aIntensive STW activities include paid or unpaid jobs/internships held during the school year that are related to a student's chosen career major.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

TABLE 20. OUTCOMES FOR SY 1995-1996 PARTICIPANTS IN INTENSIVE STW ACTIVITIES

	Percent Reporting Outcomes		Number of Students Reported	
	Partnerships	Secondary Schools	Total	Average Per Reporting School
Number of 12th Grade Students in Intensive STW Activities	48.9%	31.3%	65,291	17.2
Student Outcomes^a				
<i>Graduated from High School in 1996</i>	32.4%	13.6%	29,801	7.8
<i>Entered Employment After High School Related to Career Major</i>	14.7%	4.4%	5,508	1.4
<i>Entered Postsecondary Education/Training:</i>	20.4%	6.1%	9,563	2.5
<i>Four-Year College</i>	17.8%		3,699	
<i>Two-Year College</i>	19.0%		3,724	
<i>Vocational Training</i>	10.0%		811	
<i>Proprietary School</i>	5.1%		333	
<i>Registered Apprenticeship</i>	5.3%		309	
<i>Armed Forces</i>	13.2%		687	

SOURCE: STW Local Partnership Survey, fall 1996.

^aRates of transition (e.g., graduation rates, postsecondary enrollment rate) cannot be computed from the figures in this table because particular outcomes may be reported for varying numbers of partnership schools.

NOTE: *Secondary schools* include comprehensive high schools, vocational high schools, and regional vocational centers serving secondary students.
Postsecondary institutions include two-year and four-year institutions of higher education.

APPENDIX D

EXPLANATION OF KEY COMPUTATIONS

The system-building measures included in the tables were computed using all partnerships that responded to the survey and all their member schools as a base or denominator. In other words, the “percentage of secondary schools” implementing a particular STW component is equal to the number of secondary schools that, according to partnership coordinators’ response, make the component available, divided by the total number of secondary schools in all partnerships.

In many cases, partnership coordinators did not know the number of secondary schools that were implementing particular features. Such a response potentially undercounts the extent of implementation, so the computed statistics are lower-bound estimates of the proportion of partnership schools engaged in each activity.

Many of the summary tables show statistics computed separately for rural, suburban, and urban partnerships. This analytic perspective was chosen because access to STW initiatives is an important issue to many state agencies and to federal policymakers.

Urbanicity was determined on the basis of the standard Metropolitan Statistical Area (MSA) code classifications available in the National Center for Education Statistics’ (NCES) Common Core Data. Each secondary district in the NCES database has a designated metropolitan status based on the MSA codes. In partnerships with multiple districts, we derived an “average urbanicity code” by weighting each district’s metropolitan status code by its total secondary enrollment. Thus, a partnership that contains a large central city (urban) school district and two much smaller suburban districts would likely be given a code of “urban,” because the number of students in the urban district significantly outnumbered the number of students in the two smaller suburban districts. This classification strategy can yield some imprecision, however, for partnerships with secondary districts that span urban, suburban, and rural areas.

THE NATIONAL EVALUATION OF SCHOOL-TO-WORK IMPLEMENTATION AVAILABLE REPORTS

- Hershey, Alan, and Linda Rosenberg. "School-to-Work Implementation Progress: The State Perspective in Early 1996." Princeton, NJ: Mathematica Policy Research, Inc., 1996.
- Hershey, Alan, Paula Hudis, Marsha Silverberg, and Joshua Haimson. "Partners in Progress: Early Steps in Creating School-to-Work Systems." Princeton, NJ: Mathematica Policy Research, Inc., 1997.
- Silverberg, Marsha. "The First National Survey of Local School-to-Work Partnerships: Data Summary." Princeton, NJ: Mathematica Policy Research, Inc., 1997.
- Silverberg, Marsha, Joshua Haimson, and Alan Hershey. "Building Blocks for a Future School-to-Work System: Early National Implementation Results." Princeton, NJ: Mathematica Policy Research, Inc., 1998.
- Hulse, Lara, and Marsha Silverberg. "The 1997 National Survey of Local School-to-Work Partnerships: Data Summary." Princeton, NJ: Mathematica Policy Research, Inc., 1998.
- Hershey, Alan, Marsha Silverberg, Joshua Haimson, Paula Hudis, and Russell Jackson. "Expanding Options for Students: Report to Congress on the National Evaluation of School-to-Work Implementation." Princeton, NJ: Mathematica Policy Research, Inc., 1999.